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Part-time Adult Learners: Modelling factors that influence persistence

**Dissertation submitted for the degree of Doctor of
Philosophy of the Open University
in
The Institute of Educational Technology.**

Discipline – Educational Technology

**Submitted by
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October 2002**

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Abstract

This study set out to identify and examine factors contributing to the persistence of adult learners studying part-time in higher education. The research was carried out with distance learning students from the Open University of the United Kingdom, but evidence from the literature suggests that many of the results may be generalisable to other adult part-time learners. The literature review included a review of previous models of persistence and attrition and covered the demographic statistics of adult part-time learners as well as the three areas of social and environmental, traumatic and intrinsic factors that might be expected to affect study. Studies from health psychology were included to highlight the importance of personal characteristics in persistence.

Following the literature review, a qualitative study was undertaken, based on interviews with three groups of students: those who had persisted, those who had formally withdrawn and those who had left without notifying the university. This study refined, and reduced to twelve, the number of factors isolated from the literature. Based on these results, a tentative model was produced which was quantitatively tested through a postal survey. The analysis of the results of this survey indicated that three factors were of paramount importance. These were: -

- support for the student, from any source (with some differences identified between the support requirements of men and of women)
- an optimistic (sometimes over-optimistic) determination on the part of the student to persist and succeed in overcoming crises, such as possible illness
- the ability to study strategically and reflectively

The outcomes, while pointing to the difficulties of constructing a single model that would serve to predict persistence for all adults, highlight the importance of identifying factors that can contribute to the persistence and success of adult learners in their studies.

Acknowledgements

As I hope that I have demonstrated in this dissertation, the most important factor that encourages persistence in adult learners is support. Certainly the path to a part-time submission for a doctorate is long and arduous and, for me, would have been impossible without the support so freely given to me throughout the years.

I owe a debt to the friends and colleagues who encouraged and bullied me – Jenny Meegan, Ruth Jackson, Arlene Hunter and most particularly the late Brenda Smith.

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Chapter 1

Introduction

Context of the research

Research in the latter part of the twentieth century into part-time adult learning included a specific focus on attrition rates, and this focus will undoubtedly continue well into the twenty-first century. It was driven by what were seen as high dropout rates for adult learners, particularly for students on distance and open learning programmes, and fuelled, at least in western societies, by the reluctance of governments to fund students who did not complete their courses. Two threads have emerged from this focus: research into student dropout and into student persistence. It may be assumed that these are two sides of the same coin. However, the research dealing with dropout has tended to deal in quantitative methodology (Woodley 1987, Bird and Hailes 1996, Bernard and Amundsen 1989) although there are some highly respected examples in the qualitative field (Thorpe 1988, Rekkedal 1982, Lea 1996). The studies into persistence have more readily used qualitative methodology in addition to quantitative studies (Bean & Metzner 1985, Kember 1995, MacKinnon-Slaney 1994, Garland 1993, Heron 1997). Research into persistence also tends to encourage the development of models, which may or may not be statistically tested (Tinto 1975, Bean & Metzner 1985, MacKinnon-Slaney 1994, Kember 1995).

Rationale for undertaking the research

The reasons for undertaking the research arose from many years of working with adult learners. The anecdotal experience of academics and support staff is unequivocal in one way; they are constantly surprised that despite the misfortunes suffered by some part-time adult learners, they still continue doggedly to study, complete assignments and sit examinations in the face of sometimes appalling family crises. On the other hand, tutors are also taken aback by students who drop out because they have an extra busy week at work or a minor illness that leaves them a week or two behind in their studies. It is often,

though by no means always, students who seem not to be achieving who tend to give up; but there are also many students who persist in their studies despite continuous assessment grades in the bare pass/fail range. These apparent anomalies seemed to indicate that the act of persisting was at least as likely to depend upon individual learner characteristics and environment as it was on institutional conditions. Thus it seemed that an examination of factors affecting student persistence might add to the sum of knowledge about adult part-time learners and their problems.

A subsidiary reason for deciding to work with persistence rather than with dropout was because the problem of defining dropout was even more complex than finding a satisfactory description of persistence. There are not only varying reasons given by students for leaving courses, there are differing rates of dropout at different stages. There are students who enquire but fail to apply for a place; those who apply but change their minds; and those who register but never start the course. There are students who leave during the initial stages of their studies, not always because of low marks, and those who complete summative assignments but do not sit the examination (or final assessment). In many distance learning institutions, there is the most mysterious category of all: students who pay the full fee, never submit any assignments and never officially withdraw, despite the fact that in most cases they could get at least some of their money back.

The most general figures at the Open University in the United Kingdom (OUUK) suggest that between 20% and 33% of students drop out each year (Ashby 1996). Within this figure is a fairly substantial number of applicants who register for two or three courses, knowing that they will withdraw from all but one before the course begins. There are also students who appear to drop out, but who sometimes transfer to other institutions or occasionally have to take a break of some years from their studies because of other responsibilities, such as family or financial problems. It is therefore difficult to define dropout in a way that will cover all or even most eventualities.

There can also be problems with the methodologies of research into dropout. Qualitative research is particularly difficult to carry out with students who have left courses and may not want to be involved in interviews or meetings with an institution on which they have turned their backs. Universities regularly monitor students who withdraw from their courses, through postal questionnaires and sometimes, less formally, by telephone interviews. Much of this research depends on self-reports, and it is possible that respondents will look first at external causes (as suggested by Harris and Harvey, 1981) and that they may wish to respond in a way that reveals them in a 'good' light.

There are, therefore, many barriers in defining the reasons for dropout accurately and in a way that will be generalisable outwith a specific institution. There seem to be fewer problems involved in counting persisting students; either they finish or they do not finish. There are certainly problems, which will be discussed later in the study, in trying to discover why students remain and exactly what encompasses the 'persistent student', but it was hoped that this study would be able to identify at least some of the important factors affecting persistence.

Persistence

Although persistence is relatively easy to define in lexicographical terms, it is less straightforward to describe in institutional terms. The Oxford English Dictionary defines persistent as: 'continuing obstinately, enduring, constantly repeated, continuing despite obstacles'. This is a pro-active definition, with the responsibility for persistence placed firmly on the shoulders of the persister and without a defined endpoint. Universities often speak of 'retention' of students which assumes the possibility of 'keeping' learners by some action or actions performed by the institution. While the findings resulting from studying the reasons why students persist may well encourage universities to optimise the conditions for learning, this study postulates that a more comprehensive knowledge of the factors

affecting persistence, both external and internal to institutions, is required before efforts to retain students can be made.

In studying persistence, a major decision needs to be made about the actual constitution of persistence in higher education terms. Traditional universities will expect students to complete a degree or diploma: other institutions, often those specialising in distance education or courses for part-time adult learners, may expect students to gather modules which, together, may constitute a qualification or, singly, be regarded as professional development. These, however, are stipulations set by institutions, admittedly encouraged by the funding arrangements of successive governments, and individual learners may not set the same goals as universities do. Garland (1993) points out that there is no evidence to show that persistence is affected by student uncertainty about goals and it might well be the case that adult learners are motivated towards 'second-chance' education just because it exists as a possibility rather than because it offers a specific qualification. There is also the possibility that the goal of an individual is not a qualification, but proof that s/he is capable of studying at a higher level (Deci 1975). In this case, it is not necessary for the individual to complete a degree or diploma to have achieved the goal. In either event, students may view as persistence what higher education institutions would describe as dropout. This presents a considerable challenge in defining persistence, which was therefore necessarily defined within the context of the research population.

Because the research was undertaken with the OUUK, which provides modular courses, each of which lasts for the equivalent of an academic year, and because there are very few constraints on the subjects selected by students, it was decided to define persistence in the shortest possible terms, that is, students who continued to persist during a single module lasting for an academic year. While this may be considered by many institutions to be too short a time to indicate persistence, it does measure a cut-off point for all subjects in the

study and the certainty that the students anticipated persisting for at least one module when they registered for their course.

Aims of the research

The chief aim of this research was to discover why adult part-time learners entered, and remained in, higher education. It was hoped that isolating and investigating the factors that influenced persistence would fulfil this aim. The research questions therefore were: -

- What are the factors that influence persistence in adult part-time learners?
- Can they be prioritised and do they interact with each other to encourage persistence?
- Is it possible to produce a model of persistence that takes into account sufficient numbers of factors affecting persistence to provide a predictive tool for use with adult part-time learners?

Areas of interest to be addressed included those of adult motivation towards learning and the constraints of other simultaneous roles in adult lives. It was thought that there might be particular personality traits that predisposed a learner to persist and that these might include factors such as determination and confidence. How adults approached study and how they organised their lives needed to be examined, as did demographic factors which might affect learning. The concerns of adult life, such as family difficulties, illness or work problems were also important questions to be investigated. The interaction with the institution has been seen to be important (Tinto 1993, Kember 1995), so needed to be included for its effect on persistence. It was expected that other factors would emerge in the course of the research.

Models of persistence have been produced for fulltime students at university, mainly those in younger age groups (Tinto 1975, Bean & Metzner 1985). More recent models (Kember 1995) and MacKinnon-Slaney (1994) have dealt with adult part-time learners, but Kember's model was predicated on students from Hong Kong and Singapore and MacKinnon-Slaney's model was explicitly produced to provide guidance to advisers of

study on dealing with returning adult learners and their approach to study. A major question for the research reported in this thesis was whether it was possible, or indeed desirable, to produce a model of persistence for part-time adult learners in the United Kingdom.

The research undertaken for this thesis draws on the experiences of Open University students in Northern Ireland for purely pragmatic reasons. However, the literature covered the range of part-time adult students in higher education and it is suggested that, although further research would be necessary, the findings might be applicable to learners in both distance education and those studying through more traditional part-time attendance methods.

The initial approach to answering these questions produced the following research plan.

During this research it is intended: -

- To review the literature dealing with factors affecting persistence in part-time adult learners.
- To examine existing models of adult persistence described in the literature.
- From the literature, to identify the factors that affected part-time adult learners.
- To refine and validate these factors by carrying out a small qualitative study with students who had persisted and those who had dropped out. At this stage it was believed that other factors might emerge.
- To produce a model of the factors, prioritised as a result of the qualitative research, that could be tested on a larger group of students.
- To use quantitative methods to devise and implement a postal survey with a random sample of one thousand adult students.
- To carry out an initial analysis of the findings and draw conclusions about the strengths and limitations of the model

- To produce recommendations for further research work to refine or strengthen work on student persistence.

Structure of the thesis

It was thought that reviewing the literature might help to clarify the differences (if any) between the more traditional part-time adult learners who attended college at more or less regular intervals, and distance learners, many of whom may only have had minimal contact with their institution or tutor. It was also hoped that widening the scope of the research to include some findings from health psychology on the importance of positive behaviour would help to throw some new light on the phenomenon of persistence.

Using a qualitative approach (which was an inductive process) allowed learners not only to validate the literature, but also to generate new factors that might affect persistence.

The end-point of this stage of the research was the production of a model for initial testing. Including qualitative research was thought to be important because using only quantitative work might lose useful information or provide information that was less than comprehensive. Woodley and Kirkwood (1987) cite some of the problems of validity with, for example, postal surveys: -

"Postal surveys can be carried out asking students why they dropped out of courses. However these tend to produce low response rates and answers of dubious validity"

(Woodley & Kirkwood 1987, p.3)

Research indicates that Woodley and Kirkwood may be correct in this assumption. In a study of Attribution theory, Tedeschi and Reiss (1981) claimed that individuals who feel threatened will choose to perceive external attribution as the reason for their behaviour, thus giving a reason for an action or statement that depends on an outside agency. So a student may explain dropout by saying 'work was frantic' thus blaming employment, rather than 'I couldn't understand the course books'. Where qualitative work has been undertaken (Lea 1996), students' responses to questions on why they undertook Open

University study differed from survey results on the same topic. This is, of course, partly because of survey structure but it is noteworthy that when Lea's study allowed students to expand on why they had chosen the Open University, they spoke of lost opportunities, adverse school experiences and leaving formal education too early. Research completed by Lunneborg (1994, 1997) with Open University students produced similar results.

To undertake qualitative research involves a good deal of labour, both in collecting and in analysing data. It was hoped that by combining initial qualitative work with later quantitative methods the study would be concluded within a time span which encompassed similar learner experiences for all research subjects and thus maximised validity and reliability of the research

The quantitative approach was based on the literature and the results of the qualitative research. A preliminary model was devised and tested through more traditional survey methodology to achieve some initial statistical information about the validity of the factors and the degree of utility of these in predicting persistence. This section of the research was not expected to arrive at conclusions that would validate totally a model or models, it was intended to be used to provide a starting point for a consideration of the viability of producing any model that might explain persistence. In the event, it was possible to identify and validate a number of factors that would lead to persistence and also to suggest the relative importance of these factors. The identification of a model, it was concluded, would require further work based upon the results in this study.

The reporting of the research undertaken in the remainder of the thesis has been divided into eight chapters as follows: -

Chapter 2 introduces the literature review, which has been presented in two chapters for ease of reading. The first chapter provides a summary definition of the part-time adult learner as indicated by other major studies and continues by examining previous models of

persistence and attrition to discover their relevance to the current research. The chapter concludes with an explanation for the initial categorisation of factors pertaining to persistence, into the three areas of **social and environmental, traumatic and intrinsic** factors, based on evidence from previous models of persistence and other relevant literature on adult part-time learners.

Chapter 3 reviews the literature that has application to the three factor areas, including research from the area of health psychology. The chapter then summarises the literature and provides a diagrammatic list of the thirty six factors identified, twelve for each area.

Chapter 4 describes the methodology designed for the qualitative strand of the research, dealing with the rationale for the introduction of this part of the study, the sample chosen and the setting up of the interviews. It also explains the analysis and coding for the interviews.

Chapter 5 presents the implementation and analysis of the qualitative study which are presented together here to improve the overall coherence of the research. The chapter concludes with the setting up of a model containing twelve factors which were tentatively prioritised according to the results of the qualitative study.

Chapter 6 outlines the methodology for the quantitative strand of the research. It describes the selection of the sample and the design of the questionnaire, together with the implementation of the survey. Terms used are defined, the operationalisation of the model factors is explained and the methods by which the data was to be analysed described.

Chapter 7 begins by reporting and discussing the descriptive demographic results from the survey. The discussion of these results is introduced at this stage to avoid confusion by separating them from the results of the model factor analysis in Chapter 8. The discussion

is concluded by identifying important differences and similarities between different demographic groups that relate to persistence.

Chapter 8 discusses the findings from the statistical analyses of the model factors, both descriptive and inferential. These findings are considered in the light of the results from the literature review and the qualitative study. Identification of the factors found to be important leads to the production of a revised model for future testing.

Chapter 9 provides a conclusion to the thesis. The chapter begins with a discussion on the utility of producing a model of persistence, based upon the current research and an examination of previous models.

The achievements and limitations of the research are discussed, the need for further research outlined and possibilities indicated for future studies.

Chapter 2

Literature Review

Introduction to the literature review

In this study a review of the literature on persistence was considered to be an important part of the research as it was expected to provide much of the preliminary evidence on which to base the qualitative and quantitative studies carried out at a later stage in the research.

In order to produce coherent amounts of material, and to avoid confusion for the reader, the literature has been divided into two chapters with the second containing a review of research in the three factor areas chosen as a result of the examination, in this chapter, of some of the existing models of persistence and the demographic features of part-time adult students. This chapter begins with a summary of the characteristics of part-time adult learners and continues with an examination of the models of persistence. The chapter concludes with the identification of the three factor areas selected for investigation from the existing literature.

Overview of the literature review

Although the focus of the research was on persistence rather than dropout, the literature did not separate neatly into these areas. Some research on dropout has therefore been included in the literature review where it was felt that these studies also provided information on persistence. This provided a useful overview and some knowledge of where factors might be linked.

Unlike traditional fulltime university students in their late teens and early twenties, part-time adult learners, by definition, have other roles and responsibilities and are unlikely to be able to expend much time or energy in either mutual social gatherings or communal study. Because of these commitments, it may be that their interest in the functioning of

the institution where they are studying is less important to them than to young fulltime students, except in so far as it affects their own progress. Urzainqui Dominguez (1996) suggested that adults, by definition, have multiple responsibilities and therefore studying is only one part of their lives. Other roles, such as worker or parent, may be much more important.

For these reasons, although the two research studies reported in the later chapters were carried out with distance learning adults, specifically from the Northern Ireland region of the Open University of the United Kingdom (OUUK), the literature deals with adults studying through a variety of part-time methods. It was felt that there would be fewer differences, in the factors affecting persistence, between distance learners and other part-time adults than between fulltime students and any part-time students.

There is evidence to show that most students need to undertake a considerable amount of manoeuvring when they start studying (Hales 1991; Fung 1995; McVey et al.1996).

There are financial decisions to be taken, reorganisation of home and/or employment life, negotiation with family members, curtailment of social activities. It is undoubtedly the case that where these arrangements are eased by, for instance, an understanding and supportive partner, then the stress of starting study will be less. However, coping with being a part-time adult learner is more complex than merely setting up the conditions for study. There are many factors that can cause problems to students and, conversely, there are factors that will optimise success. It is also posited that factors which motivate some adults may discourage others, for example, lack of support from close family may lead to withdrawal; on the other hand it may actually motivate the adult student ('I'll do it in spite of them'). Therefore, it was not expected that a comprehensive and inclusive list of factors would emerge from this research: rather it was the case that exploring the interactions between factors might provide evidence that it was the number of factors or the type of

factors or the combination of factors that was important. How the factors affected different individuals might also vary.

The next section summarises the literature on the demographic characteristics of part-time adult learners.

Section 2.1 Adult learners - homogenous or heterogeneous?

Introduction

This section looks at the research on the demographic statistics for part-time adult students. With the passing of legislation such as the Equal Opportunities Act, it has become increasingly difficult for institutions to gather accurate statistics about their adult part-time students. Questions on age, past educational qualifications and occupational status can be considered to be an infringement of personal rights. For example, in 2000, 6% of new Open University students in the UK did not supply information about their previous educational qualifications and 20% concealed their ethnic origin (Slee 2001).

Because of data protection, it has been difficult to gain access to much information that would have been helpful from a range of higher education institutions. Therefore, a large percentage of the figures noted in this section either pre-date the new legislation or are taken from the current Open University statistics. However, it was possible to review some research from other institutions as well, both nationally and internationally, so the trends reported here should be valid. The section is intended to define part-time adult learners and attempt to clarify any demographic characteristics which they might have in common. For the purposes of this research, adult part-time students are defined as over 18 years and not in full-time education. The characteristics examined were age range, gender distribution, previous educational qualifications and the occupational status of part-time adult learners.

Demographic conclusions

In a major study on adult learners, Woodley et al (1987) found that across a range of courses, including residential, distance education and university programmes, participants were most likely to be of working age, from a non-manual background and to have some previous qualifications. This research was corroborated by Tight (1991) who examined demographic statistics on part-time students in twelve countries across the world as they appeared in the mid 1980s. He made the point that these figures were collected in different ways in different countries and might not be entirely accurate but he felt that, if anything, he had underestimated the numbers of adults in part-time education. He concluded that part-time students were a heterogeneous group, with large numbers of women amongst their numbers. The majority of both men and women were from the higher socio-economic classes. He further suggested that part-time adult learners had either fairly high or fairly low previous qualifications and that they were older than full-time students; the majority between 30 and 40 years (Tight 1991, p.51).

Other research has confirmed these conclusions (McVey et al 1996, Biner et al 1995) although there is some evidence that the age profile of adult learners has altered in the last twenty years (Fung 1996, Wallace 1996). An increase in numbers in the younger age groups of part-time learners has been noted, with, for example, 20% of new OUUK applicants aged under 25 years in 2000 (Slee 2001). Any overall lowering of the age profiles of students might of, course, be due to the effects of the economic recession in the eighties and the growth of consumerism in the nineties rather than any educational change. The small but steady rise in the numbers of young students might therefore be related to economic change as well as the increasing costs of higher education.

Distribution by gender seems to depend upon the 'traditional' areas of study. More women than men are now studying part-time (McVey et al 1996, Ashby et al 1998, Slee 2001),

although they still tend to opt for courses in the Arts and Social Sciences rather than Engineering and Technology (Ashby 1996, McVey et al.1996). Tight's study suggested that in the UK, female students tended to be attracted to courses that reflected their occupational numbers; very few women in Engineering and relatively few men in Nursing. Previous educational qualifications provide the greatest difference between the OUUK and other higher education institutions. The OUUK is entirely open access, whereas most of the more traditional universities still require some evidence of educational attainment, even for part-time adults. While OUUK asks intending students about their previous highest educational qualifications, it is not a compulsory question, and 6% do not volunteer this information. However, it is clear that there have been changes in the educational status of applicants, with 35% in 2000 having 'High' previous qualifications as against 29% in 1996 (Slee 2001, Ashby 1996). In the OUUK, a high level of previous educational qualifications indicates at least a Higher National Certificate, equivalent to the first year of university study.

It is important not to over-estimate this change which is described here for a single institution. Social policy and cultural changes since 1996 might reflect either the government's support for lifelong learning, an increase in qualifications gained at secondary level and/or a greater number of universities offering part-time courses to adults. It might also indicate pressure for junior and middle managerial employees to increase their skills and knowledge in a fast moving technological world.

The occupational status of adult part-time learners indicates that the higher the socio-economic level, the more likely the individual is to be studying. A NIACE (National Institute of Adult and Continuing Education) survey in 1990, which covered all adult and further education levels, used the Registrar-General's classification of social classes A-E to show that 44% of adults in the AB groups either were studying or had been studying in the previous 3 years as against 18% of adults from the DE groups (Harrison 1993, p.8).

Woodley et al (1987) found similar results, using the Hope-Goldthorpe classification which divided occupations into three: Service, roughly the Registrar-General's categories of A and B; Intermediate, approximately C1 and part of C2 and Working, mostly C2, D and E. Even allowing for differences in categorisation, it was clear that 70% or more adult students in higher education were from the Service category. Both of these studies concluded that individuals from the higher occupational levels, however measured, were more likely to participate in higher education.

From the evidence presented from the research literature it seems unlikely that part-time adult learners can be strictly categorised. What can be deduced is that the largest number will be between the ages of 25 and 40, in employment and, although there are differences between men and women, likely to be from the Registrar-General's categories of A, B and C1, which include professional, managers and 'white collar' workers. Evans (1994) found that there was considerable diversity in the social and educational background of adult learners and Brown (1986) claimed that male distance learners were wealthier than female distance learners. This seems to be consistent with findings that a relatively small percentage of students quote 'lack of finance' as a reason for leaving a course (Peters 1992, Bird and Hailes 1996, McVey et al. 1996). In demographic terms, however, there seems to be little difference between distance learners and those who attend university or college on a part-time basis.

Having given a brief overview of adult students in demographic terms, the next section deals with the research into models of persistence and some conclusions reached about the areas of students' lives which might contribute to persistence in learning and which might be included in the present study.

2.2 Models of Persistence and Attrition

Introduction

Considerable work has already been undertaken on the research into, and production of, models which purport to explain student persistence and attrition. Many of these include institutional and academic factors as important contributors to persistence (Tinto 1975, Tillman 2002). Others stress environmental and dispositional factors (Bean & Metzner 1985, Garland 1993) and yet other research combines academic success with environmental factors (MacKinnon-Slaney 1991, Kember 1995).

A consideration of these models seems to indicate that there is a tendency to assume that persistence and retention can be seen as a single entity. However, as indicated in the introduction to this study (p.3), there are considerable differences in meaning between the two terms. The research reported here contends that, for part-time adult learners at least, persisting is what the *student* does and this is affected by the pressures on the individual, as well as by inherent characteristics. Retention is what the institution attempts to do in order to encourage students to persist, and this is more likely to be achieved through systems that are introduced but which do not necessarily see learners as having individual needs or specific clusters of needs. Retention does indeed take into account the factors that have apparently been identified as precipitating dropout, but is unable to deal, for the most part, with environmental and dispositional factors.

Although, logically, student interaction with the institution will have an effect on persistence, it is contended in this study that this is only one factor, and by no means the most important one, that affects part-time adult learners. For students with multiple roles and responsibilities, a more complex definition of the factors affecting persistence is required.

The remainder of this section considers some of the more widely known models of student progress and suggests that these may not account for all the factors affecting part-time

adult learners. The six models reviewed in this chapter were chosen because they represented recognised areas of research into student progress. They are by no means the sum of the research undertaken over the years, but rather they are well-known examples of significant approaches to the problem of student persistence.

Tinto's Conceptual Schema for Dropout from College (1975)

This schema, which is one of the best known early models, is sometimes referred to as a model of integration rather than dropout, as it depends conceptually on a focus on student academic and social integration. It was based on Durkheim's Theory of Suicide, which suggested that when individuals were not socially integrated, they were more likely to commit suicide (Tinto 1975). Tinto felt that it was possible to view a college as a separate social system, and that therefore Durkheim's theory would apply to student persistence.

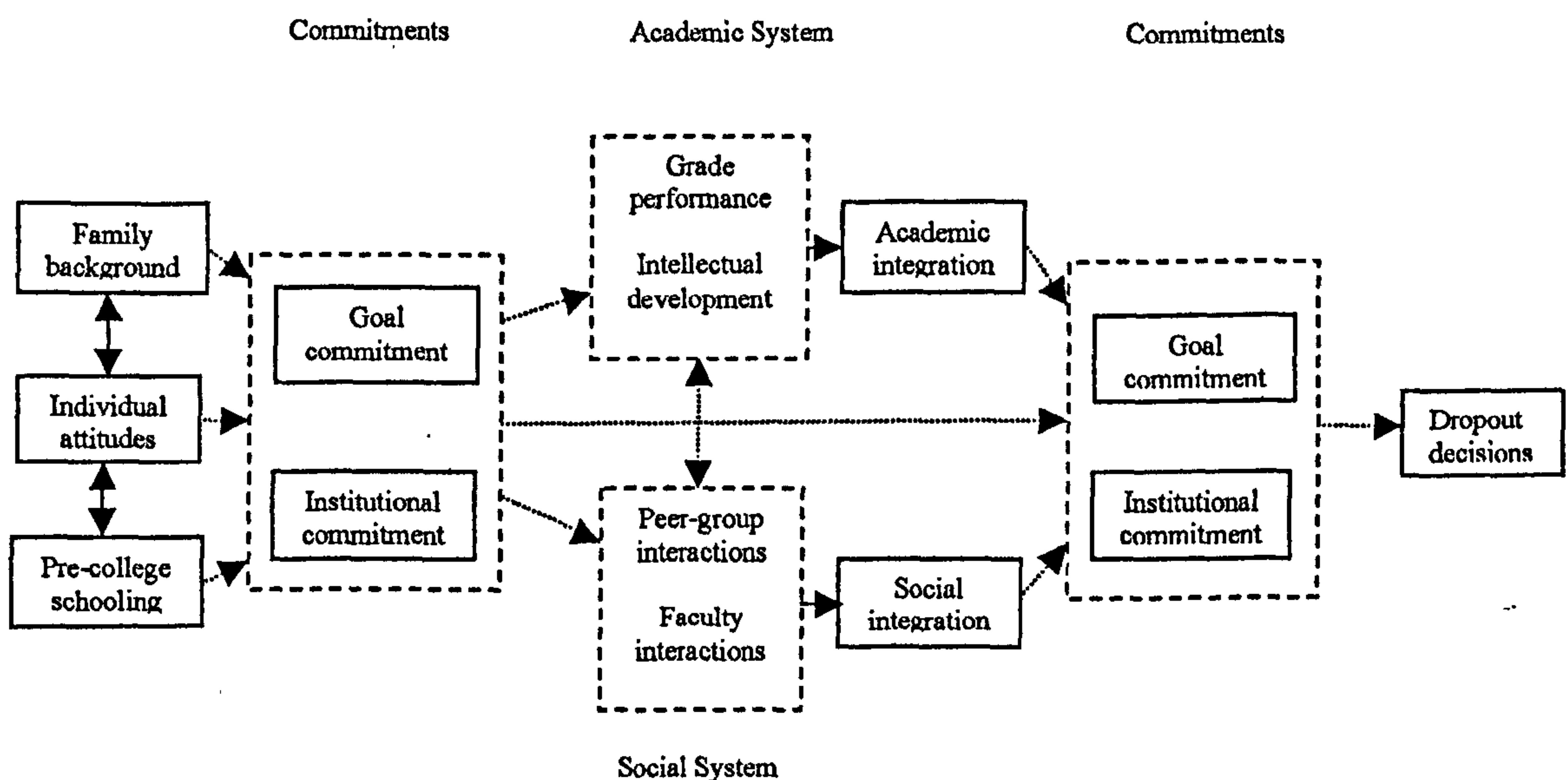


Figure 2.1 A conceptual Scheme for Dropout from College (Tinto 1975, p.95)

This model was intended to explain dropout in fulltime traditional students who were resident at or near their university. It can be seen in Fig. 2.1 that it is proposed that students who achieve both academic integration and social integration are more likely to persist as they will be committed to the institution and also to their goals. The pre-college factors include background, individual attitudes and pre-college schooling and Tinto agrees

that there is a large variety of background characteristics that will affect the student.

However, he takes these as given and claims that: -

"Given individual characteristics, prior experiences and commitments, the model argues that it is the individual's integration into the academic and social systems of the college that most directly relates to his continuance in that college."

(Tinto 1975. p. 96)

He also admits that there are external events that may cause lack of persistence, but suggests that the best way to observe these is through the changing commitment to the institution. Tinto's model has been tested extensively (Cabrera et al, 1992; Bernard & Amundsen 1989) and found to predict persistence and dropout quite accurately for young fulltime students entering college soon after leaving school, but there is no real evidence to indicate that it would fit the profile of part-time adult learners. Rautopuro and Vaisanen (2001) describe research that claims that mature students report difficulty in integrating with the institution and especially with campus activities, but it might realistically be suggested that this difficulty may not worry mature students. The concentration on integration with the institution would almost certainly not apply to part-time adult learners, who may well have no interest in the social amenities of the university, preferring to return home as soon as possible after class to change roles with the minimum of time wastage. In distance learning courses, students may not even be aware of the facilities that are available to them. Despite these caveats, Tinto's research did investigate student characteristics which might affect persistence (Peters 1992). He suggested that lack of parental interest in education, lack of academic ability and poor achievement at school were likely to affect persistence negatively. He also thought that students who were impulsive, inflexible and lacked occupational ambition were less likely to persist.

Further research from Tinto has led to conclusions about student retention (Tinto 2002).

He suggests that in order to encourage persistence, it is necessary for an institution to pro-actively offer support to students and facilitate them in their efforts to become socially and academically integrated. Again, there are obvious difficulties in achieving this with part-

time adult learners and Tinto's conclusions still seem to avoid a comprehensive explanation of the factors affecting student persistence for this group.

The factor in Tinto's model that is most likely to apply to part-time adult learners is that of goal commitment. This is not necessarily the goal of a specific occupation or career; it is enough for an intending student to commit to the goal of college completion (Tinto 1975, p. 102). It would seem to be even more important to an adult learner, who has to juggle study time with other major responsibilities, to commit to a goal of persistence and achievement.

The next model to be considered is a recent examination of factors leading to possible dropout. It is included because it builds on Tinto's major thesis that it is lack of integration with the institution that is the greatest barrier to persistence.

Tillman's Barriers to Student Persistence in Higher Education (2002)

Tillman's research consists of an examination of studies of student persistence and the barriers to this. He relies on an Interactionalist perspective, which focuses on the interaction between the student and the college. Although his introduction seems to suggest that he is thinking of traditional fulltime students, his discussion of the perspective includes adult learners. He concludes that there are six factors that can produce barriers to persistence: -

- 1) **Lack of preparation** - this factor seems to apply to adults rather than to school leavers and he claims that many adults lack the ability to read, write and count at the level required for higher education. He suggests that strong remedial programmes should be added to university programmes.
- 2) **External commitments** - again, he seems to deal with adults, acknowledging their lack of time due to other commitments. His solution for dealing with this problem is to

offer special orientation sessions and programming for the entire family, presumably using yet more of their time, which seems somewhat illogical.

- 3) **Social isolation** - here he returns to the needs of young fulltime students and suggests that students who do not make an effort to join in the social activities are at risk. He feels that the institution should try to encourage students to become involved. Again, this might not be suitable for part-time adult learners.
- 4) **Interaction with faculty** - here he quotes research that shows that students who interact frequently with faculty are more likely to persist. He suggests that faculties should be pro-active in this, possibly having academic advisers and mentors to meet regularly with students on a one-to-one basis.
- 5) **Financial need** - Here he identifies the change from grants to loans for fulltime students and the lack of any resources for adult returners. His solution for this is political, persuading the authorities to change their strategy to help adults.
- 6) **Academic failure** - here he identifies the older student as being more likely to perform less well in assessment, because of other commitments, and suggests academic advisers to support the adult learner.

Tillman represents research that purports to deal with non-traditional students as well as the younger fulltime learner and also suggests that the institution can encourage persistence by providing advisers, counsellors and mentors. His work, like Tinto's, offers solutions that ask the institution to work harder at the tasks they already do with fulltime students and attempt to involve the part-time adult student's family as well as the student.

However, these methods might not be popular with a multi-tasking adult learner whose time is already proscribed and these tactics might discourage rather than encourage persistence.

By contrast, research reported in this study contends that part-time adult learners have different and more immediate goals in education and that the pressures on the adult, for whom education is only a part of life, will be more varied and may depend upon established roles and functions. The persisting student will therefore have to contend with more external influences than the fulltime traditional student. This would include the environment outside the college, which may be more important to the individual than the studies undertaken within the college. Unlike the traditional young student, many adults will already have a fully formed social, employment and family life to manage.

Other research has focused on the learner's characteristics and the environmental pressures for non-traditional students. Representative of these is the work done by Bean & Metzner (1985) and Garland (1993)

Bean & Metzner's Conceptual Model of Non-traditional Student Attrition (1985)

Bean & Metzner's design was intended to examine non-traditional undergraduate attrition and they concluded that

"the chief difference between the attrition process of traditional and non-traditional students is that non-traditional students are more affected by the external environment than by the social integration variables affecting traditional student attrition."

(Bean & Metzner 1985, p.485)

Bean and Metzner realised that adults were neither able to join with, nor were they necessarily particularly interested in, the extra-curricular activities that form so large a part of the traditional student's life. They perceived that although there would be analogies between traditional and non-traditional students in areas such as academic progress; the external environment away from the university was much more important to the needs of adults than social life on the campus. They contended that rather than adopting models such as Tinto's, which had been produced for the traditional fulltime student, it was necessary to shape a model specifically for the part-time adult learner.

The model they produced was a path model, in which they identified 'direct' effects, with a separate category for the 'most important' effects; 'compensatory interaction' effects and 'possible' effects. These effects can be seen in Figure 2.2 below and it will be noticed that the model becomes particularly complex when the compensatory and possible effects are added in. Although Figure 2.2 is intended to model non-traditional attrition, it could equally predict persistence.

In this model, the variable of social integration with the institution is seen to be less important than in Tinto's or Tillman's research, although academic integration still comprises one of the four main sets of variables. Where Tinto connected academic and social integration, Bean & Metzner allied academic progress with environmental variables for the adult student. This meant that, while Tinto had claimed that a student who was not socially integrated into the college facilities would be more likely to drop out, Bean & Metzner suggested that a student whose environment outside the institution was supportive, who had sufficient financial resources and could cope with employment and family responsibilities would be more likely to persist academically.

In addition they gave more prominence to the background variables and added in psychological outcomes as an important set of factors. They chose their variables based on existing theories about learning and a meta-analysis of the literature in three areas: research into attrition with fulltime traditional students, descriptive studies of characteristics of non-traditional students and research into attrition in non-traditional learners (Bean & Metzner 1985, p. 493).

Unlike Tinto and Tillman, Bean & Metzner concluded that the background characteristics of non-traditional students had an important effect on the academic outcomes for individuals and also affected the academic variables. Additionally the student's background also affected the environmental variables, which, in turn, affected the decision

to drop out. Conversely, as Figure 2.2 shows, the social integration variables were weakly linked to outcomes for the learner.

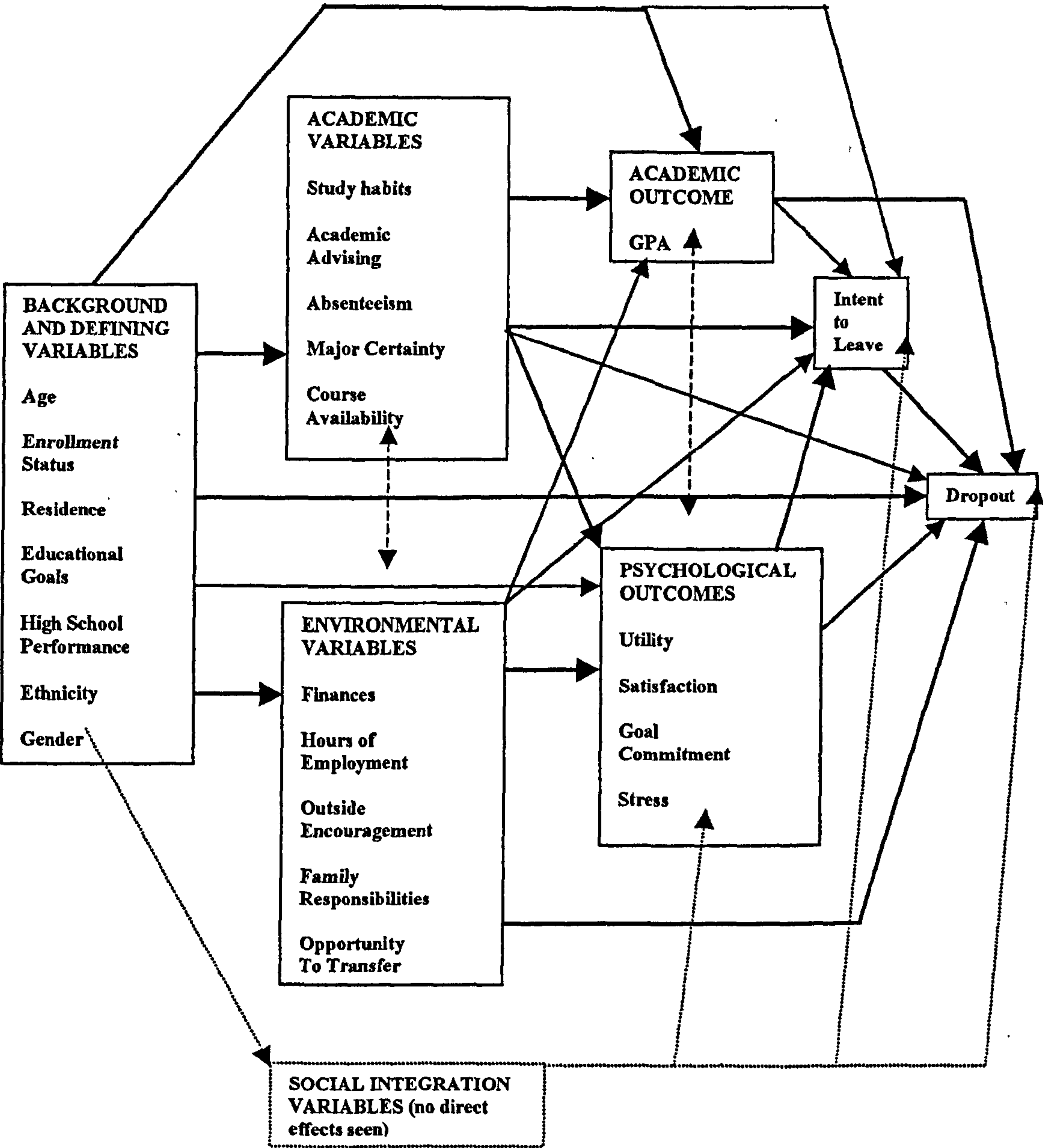


Figure 2.2 A Conceptual Model of Non-traditional Student Attrition (Bean & Metzner 1985)

- Key:
- direct effects
 - ➔ direct effects presumed most important
 - ➔ compensatory interaction effects
 -➔ possible effects

The most important developments in this model, therefore, were the interactions between the academic variables and the environmental variables and the connection between the psychological outcomes and the academic outcome. Bean & Metzner concluded that: -

"When academic and environmental variables are both good (i.e. favourable for persistence) students should remain in school, and when both are poor, students should leave school."

(Bean & Metzner, 1985 p.491)

However, and more importantly, they also added: -

"When academic variables are good but environmental variables are poor, students should leave school, and the positive effects of the academic variables on retention will not be seen. When environmental support is good and academic support is poor, students would be expected to remain enrolled....Thus, for non-traditional students, environmental support compensates for weak academic support, but academic support will not compensate for weak environmental support."

(Bean & Metzner, 1985 p. 492)

They also averred that although students scoring well in their academic work and feeling satisfied with their course and goals would persist with their studies; those with good results who had become convinced that the course they were doing was not helping them to achieve their goal would be less likely to persist. Stress caused either by background factors or environmental factors might also cause students to drop out of university.

This research by Bean & Metzner highlights the importance of the inherent characteristics and motivation of students, together with their environmental circumstances and pre-university background, as important variables for non-traditional learners. In this research, however, little attempt was made to investigate these factors in any detail. This may have been because adult learners appear to be a completely heterogeneous group with as many sets of environmental circumstances as there are students; and this renders an examination of factors extremely difficult. In addition to the diversity of students' circumstances, it is probable that environmental and background factors will interact with inherent characteristics as well as with each other. Despite these problems, it was felt to be likely that factors common to individuals with similar environments and backgrounds might be identified through the current research being undertaken in this study.

Research that included an examination into the background of adult learners was undertaken by Garland in 1993. She differentiated between dispositional and environmental factors and her research was focused on the individual learner and the barriers to persistence were described from the student's perspective.

Garland's Potential Barriers to Persistence in Distance Education model (1993)

This research was an attempt to identify the barriers to persistence for distance learners, and involved a qualitative study of 47 students who had registered in the University of Columbia. 17 of these respondents were students who had withdrawn and 30 had persisted, that is, they had completed the final examination.

The research results found that there were four areas which could produce barriers to persistence; situational, which involved environmental pressures such as support and multiple roles; institutional, including poor materials or late arrival of course books, administrative errors and difficulties with tutors; dispositional, which included inherent characteristics, and epistemological, which described the conflict between the student's expectations and the requirements of the course. These areas are illustrated in the model in Figure 2.3 below.

By far the greatest number of barriers could be set up by the institution. These included problems with the contents of the courses themselves and the support for the programme, as well as the advice given to students. Again, presumably if these were satisfactory, then the student would be more likely to persist.

Interestingly, not only had the students who had withdrawn experienced problems in all four areas, but those who had persisted had also experienced these problems (Garland 1993, p.184). No further investigation into this apparent anomaly was undertaken,

although Garland does include these areas in her model.

1	Situational
1.1	Poor learning Environment
1.1.1	Lack of support from family or peers
1.1.2	Poor study environment (community, home)
1.2	Lack of time
1.2.1	Change in circumstances
1.2.2	Took more time than expected
1.2.3	Overcommitted, with multiple roles and responsibilities
2	Institutional
2.1	Cost
2.1.1	General cost (fees materials)
2.1.2	Cost of attending the on-campus lab.
2.2	Problems with institutional procedures
2.2.1	Delay in registration or late arrival of course materials
2.2.2	Poor communication with the institution
2.3	Problems with Course Scheduling/Pacing
2.3.1	Problems with course scheduling
2.3.2	Course poorly paced (too slow, uneven, too fast)
2.4	Problems concerning Tutorial Assistance
2.4.1	Tutor was unavailable
2.4.2	Calling the tutor was intimidating
2.4.3	Poor communication with the tutor
2.4.3.1	Personality/communications conflict
2.4.3.2	Poor feedback
2.5	Instructional Design Problems
2.5.1	Problems with the on-campus lab,
2.5.2	Problems with distance delivery instructional design
2.5.2.1	Phone call inadequate for problem solving
2.5.2.2	Need for other media/learning resources
2.5.2.3	Need for unavailable equipment/media
2.5.2.4	Problems with the quality of the course materials
2.5.2.5	Problems with language and style of the course materials
2.5.2.6	Course focus, expectations were unclear
2.5.2.7	Course was overwritten
3	Dispositional
3.1	Lack of a Clear Goal
3.2	Stress of Multiple Roles
3.3	Time Management/Procrastination Problems
3.4	Learning Style Problems
3.4.1	Need for face-to-face, oral, visual learning
3.4.2	Need to know how to "play the game", be in learning mode
3.4.3	Studying style problems
3.5	Adult Pride
3.5.1	The need for achievement (high marks, fear of failure)
3.5.2	The need for independence
3.5.3	The need for respect
3.6	Psychological, social and economic factors
4	Epistemological
4.1	Epistemology of Course Differed from Student's Epistemological stance
4.1.1	Content was too technical, scientific
4.1.2	Content was too theoretical, abstract
4.2	Internal Epistemological Gap Between Presented Content and Expectation
4.3	Content Lacked Personal Relevance, Interest
4.4	Lack of Prerequisite Knowledge

Figure 2.3 Potential Barriers to Persistence in Distance Education (Garland 1993, p. 185)

Garland makes an interesting point under 3.3.6 in the model, which refers to psychological, social and economic factors, where she refers to a set of possible disadvantages, such as poor previous education, poor learning strategies and lack of self-confidence. However, despite the possibility that these factors might be the most important in predicting persistence or dropout, Garland makes no further comment on whether these 'disadvantaged' students were more likely to persist or to drop out. As with the other models reviewed here, there seemed to be an unwillingness to investigate the 'difficult' areas of individual differences in adult learners.

Garland's model deals with distance learners only, and, like Bean & Metzner, who used research with adults attending college on a part-time basis, she admits that external influences are of considerable importance to part-time adult learners.

Models that concentrate on the importance of individual differences between students include Kember's model of student progress. Despite claims that his model is not transferable to students in the UK (Woodley et al 2001), its thoroughness and combination of qualitative and quantitative research adds to the sum of knowledge about adult persistence.

Kember's Model of Student Progress (1995)

Kember's work was originally partly based on the work of Malcolm Knowles (1990) on andragogy and his research was influenced by Tinto's model of attrition (1975). Kember's model, therefore, built upon and included much of the previous research in this area. His research was based on distance learning students, although he did not differentiate between the needs of distance learners and part-time adults attending college. As he considered external influences to be of seminal importance, his model, in Figure 2.4 below, although appearing similar to Tinto's, emphasised different elements to those that Tinto felt were important.

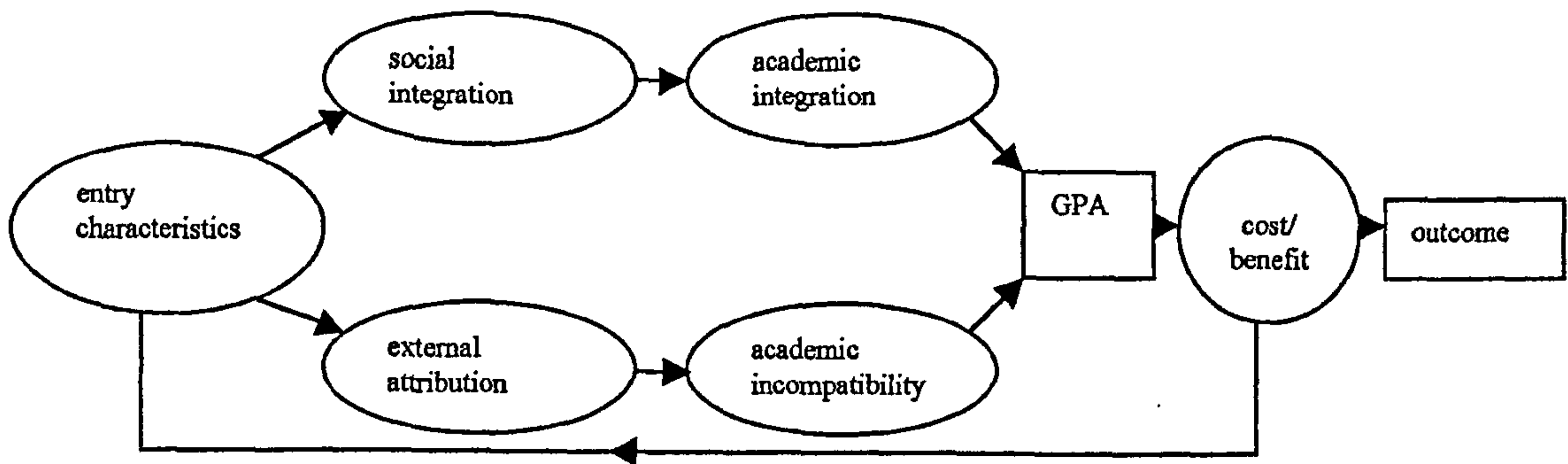


Figure 2.4 – Kember's two track model of student progress (Kember 1995, p. 55)
(GPA stands for Grade Point Average – a measure of student academic achievement)

Kember included a variety of factors that he concluded would affect persistence. His model has been used in several higher education locations, including the United Kingdom, Papua New Guinea, Tasmania, Australia and Hong Kong, so would seem to be reliable. It should be remembered that all of these studies had as their subjects distance learners, which may have led the research to concentrate on specific concerns.

In choosing his factors, he acknowledged the apparent uselessness of utilising entry characteristics in his model of progress because these factors could not be used to influence policy. However, he included them because he claimed that the student's 'background' would affect his goal commitment (Kember 1995, p.71). It is unclear precisely what is meant by 'entry characteristics' as there is a divergence of opinions as to what actually should be included in this factor (Woodley & Parlett 1983, Rekkedal 1971). Kember himself had found in earlier research, that there were relationships between factors such as, for example, age, number of children, housing conditions and region of residence (Kember 1981)

To illustrate the effects of entry characteristics, he quoted research by Kennedy and Powell from the Open University. This study included a counsellor's report on a student with a low level of scholastic achievement and coming from a working class background: -

"A friendly but distant relationship has been built up with the counselor (sic): *the reason for the distance is undoubtedly an exaggerated mixture of respect and cautiousness which this student feels when he encounters white collar workers. He could in some circumstances, no doubt, be extremely antagonistic towards those whom he feels may have a down on the working class* and he is of the opinion that the Open University does not really try to enroll (sic) working class students. On the other hand, he sees the workers cannot be readily interested in the Open University as his own attempts to influence workmates have shown him.

In general, then, he is not easy to get through to because he feels somewhat uncertain of his own position (jobwise) and somewhat unsure of the position of academics who are neither bosses nor white collar workers.

His motivation is extremely complex. *No doubt it is partly intrinsic (self-fulfillment (sic) through study), yet while it is by no means overtly extrinsic (degree collecting), there is an element of the desire to obtain a degree (or qualification in Music) to show that he is 'as good as them'"*

(Kennedy & Powell 1976,
p.69, quoted in Kember 1995, p.71 -
italics added)

What Kember was in fact reporting was a counsellor's rather subjective opinion of an Open University student who came from a different background than did the counsellor. In this case, what apparently affected the goal commitment of the student was the opinion of a university employee. However, although this extract may only reflect the views of the counsellor, it does indicate the complexity of the background factors affecting adult learners.

Kember's model also includes an academic 'score rating' which is required to evaluate progress and will encourage the student to persist. It should be remembered that the emphasis in Kember's model is on progress rather than persistence; so the end point is a decision about the cost/benefit of persistence for the student.

It is important to remember that where Kember refers to social integration, he is not describing the efforts made by the institution, as in Tinto's model, but the external support offered to students. This is made slightly more explicit in his full model of students progress in Figure 2.5 below.

Since its inception, his model has been refined and subjected to quantitative analysis which, he claims, confirms that it can be used to predict success for students. His full model of student progress takes into account the factors affecting the attributes of his

earlier model so, for example, social integration and external attribution are affected by a variety of factors which reflect the literature as well as his qualitative analysis. It is interesting to note that his model does not expand on entry characteristics and it therefore seems that he is unwilling to define these.

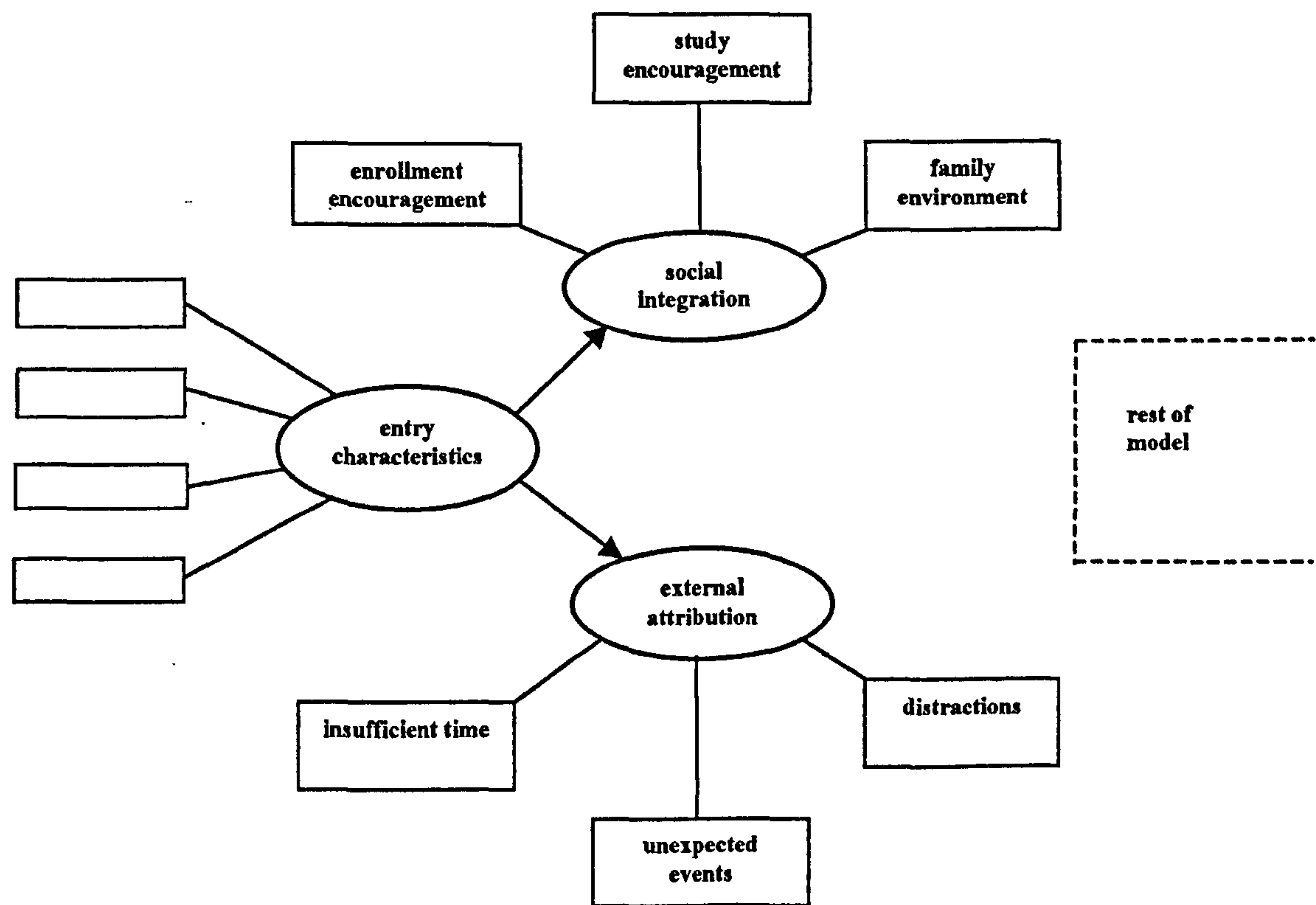


Figure 2.5 – part of Kember’s full model of student progress, showing factors that affect external attribution and social integration (Kember 1995, p. 222)

This half of the model deals exclusively with factors which are outside the control of the institution and, indeed, in the second half of the model, he also includes factors that cannot be readily influenced by the university. He also defines characteristics affecting academic integration, which leads to the probability of persistence, in a different way from other models; adding intrinsic motivation, positive course evaluation, a deep learning approach, which cites Marton & Säljö (1975a) and Entwistle & Ramsden (1983), and reading, by which he means an ability to understand the language of instruction. This might seem to be specific to his Chinese students, many of whom might be studying in a second language; but it also might encompass students who were using their native tongue, but whose reading skills were not at a sufficient level to deal with academic texts. This would

fit with Garland's epistemological factors which cause barriers to students. Academic integration, together with its opposing factor of academic incompatibility, will lead to an appropriate level of assessment grade, which in turn will cause the student to decide whether or not to persist. This may well be the case when students are paying very high course costs, but research has found in the United Kingdom, that few students leave courses because of lack of finance (Bird & Hailes, 1996; McVey et al., 1996).

Kember's research comes close to examining all the external events that might affect student persistence, but even he does not attempt to examine the entry characteristics in any detail. It is the view of the author of this study that students' entry characteristics will influence persistence and it is intended to investigate these to ascertain whether they affect the likelihood of persistence. It seems probable that one type of individual would be more likely than another to persist, either because of inherent characteristics, or as a result of previous experiences at school or work. Evidence to support this thesis comes from the final model to be considered in this section. This is a model focused on persistence in adult learners from Fiona MacKinnon-Slaney which starts with a focus on the individual characteristics, including those brought to the learning programme.

MacKinnon-Slaney's Adult Persistence in Learning Model (1994)

This model seems to be similar to the models of Tinto and Tillman, but in this case the emphasis is on discovering the entry characteristics, defined as inherent and individual, which will contribute towards, or work against, persistence.

MacKinnon-Slaney's work was based on an analysis of literature on adult development stages together with a focus on personal issues, learning approaches and interaction with the institution. Her model is intended to guide counsellors working with adult students who are returning to a part-time higher education setting. The aim of the model is to

facilitate persistence through advice and guidance, so the focus is on retention by understanding and supporting individual student needs on a one-to-one basis.

The model constructed by MacKinnon-Slaney defines the persistent adult in terms of individual hardiness and competence which may be developed over the period of the learning programme. The idea of change or life transitions is also highlighted in the model which has ten factors, sub-divided into three components, all of which influence persistence (Figure 2.6).

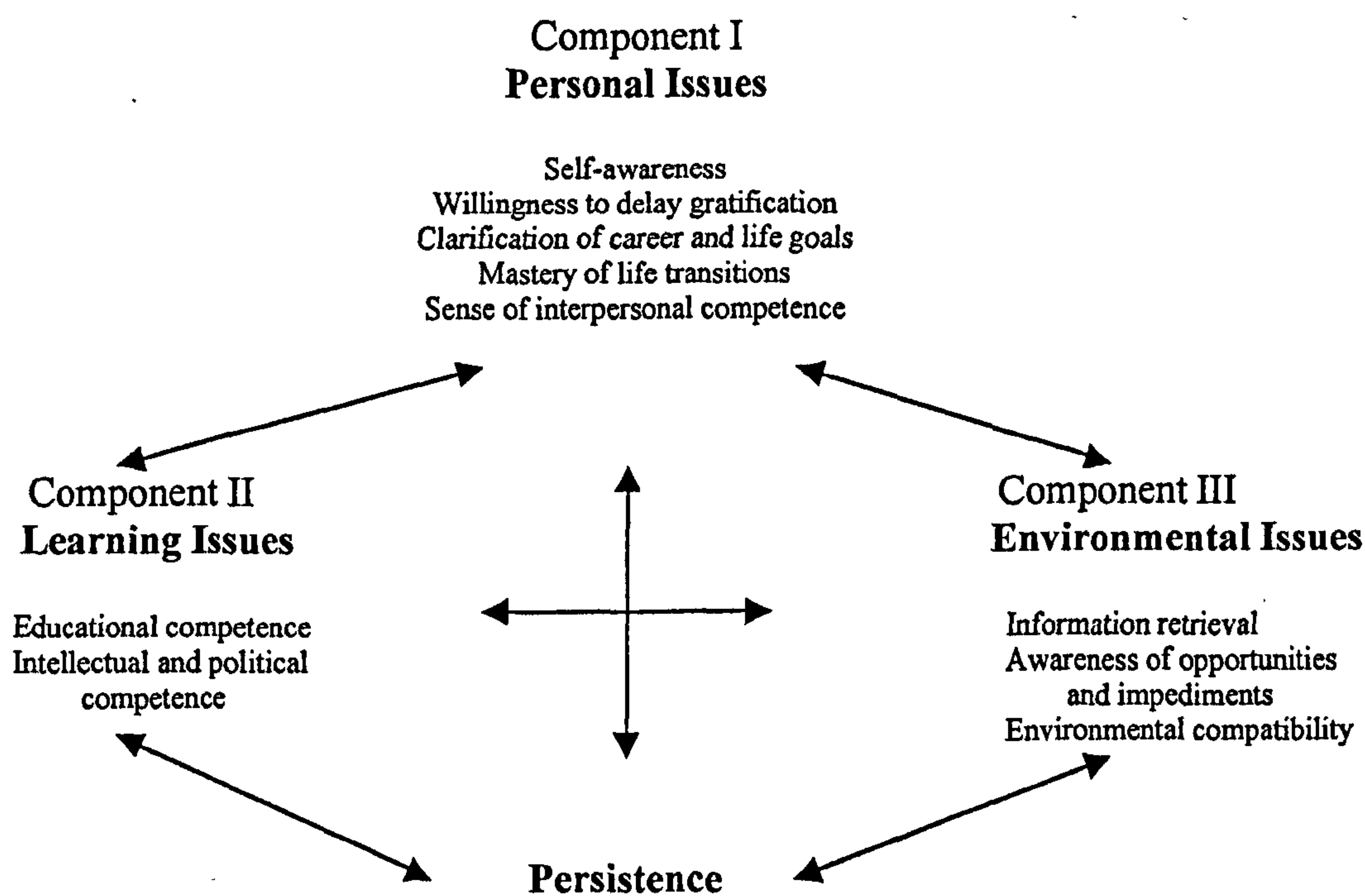


Figure 2.6 - The Adult Persistence in Learning Model (MacKinnon-Slaney 1994, p.269)

The factors under Personal Issues in Component One are individual characteristics that are considered to contribute to persistence. They also relate to self-reflection in, for example, clarification of career and life goals. It is also likely that the habit of self-reflection would facilitate feelings of control and persistence. MacKinnon-Slaney concludes: -

"In particular, a robust sense of self, a hardy academic self-concept, self-assurance in achievement situations, a healthy dose of achievement motivation and a certain degree of confidence in managing the bureaucracy must be present on a day to day basis."
(MacKinnon-Slaney 1994, p. 270)

Component Two, which relates to learning issues, covers not only the institution's evaluation of educational competence, but also the students' evaluation of their own learning skills and so deals with self-confidence and reflection. It also deals with the political aspects of the institution, including race and gender. The focus is not only on the students learning the 'system', but also on alternative models of learning that will suit different learners. Thus this component maintains the individual focus for student persistence. Component Three deals with the institution's need to facilitate individual differences by considering family problems and career issues, as well as any physical difficulties, such as poor sight or chronic illnesses.

Despite the apparent emphasis on retention by the institution in this model, it is predicated on an understanding that it is individual differences between students, and their situation both within and outside the institution that should be the first consideration when supporting adult learners' persistence. MacKinnon-Slaney has therefore devised and used the APIL (Adult Persistence in Learning) Scale Questionnaire which she claims is able to predict where problems may arise with new students. The questionnaire is intended to be used by study counsellors in higher education institutions and is clearly based on the adult learner and the problems faced in returning to study. A concern associated with this research might be that the materials on which the model was based were taken from literature and the experience of the author. As the model could be said to lack a basis in empirical research, it might be possible that factors pertinent to adult learners have been overlooked..

Summary of findings from Models of Persistence

In reviewing these models, it can be seen that as research builds upon previous findings and the student population becomes more diverse in terms of age, needs and methods of presentation, some academics studying part-time adult learning are still emphasising the role of the institution in various ways. This is a perfectly rational approach, as there is a

need to increase retention, particularly for adult learners. However, by concentrating on retention, it may be that many of the factors affecting persistence in adults are being ignored, precisely because they are so individual and difficult to categorise. It is contended in the study reported here, that only when the background, environmental and personal characteristics, together with the external elements that actually impinge upon the student role during a course, are considered, can strategies for retention be sustained. If a type of student who is likely to persist can be identified; and the attributes contributing to persistence such as personal characteristics, situation and resources can also be discovered then, despite a level of trauma occurring during the study period, this individual is likely to complete a course.

It therefore seems that it would be useful to take from the existing models those parts that may combine to provide information about part-time adult learners who already have a multitude of roles and for whom study may not be the most important part of their lives.

These are seen as: -

- Interaction with the institution, included in all models reviewed, although this may be at a level that does not, and cannot, maintain frequent contact.
- Social integration: this is not the social interaction with other students and university facilities highlighted by Tinto (1975) and Tillman (2002); but rather the student's external social integration with family, colleagues and friends as outlined by Garland (1993) and Kember (1995). This may, of course, include contact with other students on the course of study on an informal basis, as these new acquaintances become friends.
- Environmental factors, highlighted by Bean & Metzner (1985), Garland (1993), MacKinnon-Slaney (1994) and Kember (1995). These might include support, study environment, other roles and responsibilities and employment.

- Approach to study was included in the models of Bean & Metzner (1985), Garland (1993) and MacKinnon-Slaney (1994). For all the models, the academic background experience of students was considered to be important in helping them to persist, but Garland and MacKinnon-Slaney specifically identified the individual approach to learning as seminal to persistence.
- Inherent characteristics, identified by Tinto (1975), Bean & Metzner (1985), Garland (1993) and MacKinnon-Slaney (1994). Characteristics mentioned include motivation, flexibility, a clear goal, a deep learning approach and self-confidence.
- The appearance of traumatic occurrences during the course. The importance of this was suggested by Garland (1993), Kember (1995) and MacKinnon-Slaney (1994) and might include changes in circumstances, unexpected events and illness. However, this factor was not emphasised in the models. In view of the problems that can and do occur in many adults' lives, such as bereavement, redundancy, family illness, personal financial problems and many others, it seems strange that the effect of these concerns has not been considered more fully. It can be argued that this is because models of adult learning are concerned more with retention than with persistence, and institutions can do little about changes in circumstances, but in fact, flexibility in course design and pace, to help adults cope with changing circumstances, could be within the remit of the institution.

Identification of Factor areas for Research into Persistence

Following the summary of the review of the six models, it was decided that the factors affecting student persistence could be logically divided into three areas for investigation.

In identifying the areas, no decision was made about the importance of the factors included. It was expected that some might have no particular relevance to persistence, but, as they had been identified in the past, it was thought important to include them. The division of factors was as follows: -

social and environmental factors included time and space available for learning, together with the individual ability to organise these; patterns of employment and other responsibilities apart from the student role and the ability to take part in tutorials or other institutional offerings. Support of significant others and the accommodation of social activities and friendship outside the institution was considered to be especially important to busy adults, although it was felt that some adults, at least, would benefit by using fellow students for support.

traumatic factors could include illness, bereavement, unemployment or lack of success in study. This area also included the on-going stress of caring for children or the elderly. It was assumed that the student's level of adaptation to the everyday stresses of living would have an positive affect on persistence, so coping strategies were an important part of the literature in this area.

intrinsic factors were the least well researched in the learning models reviewed above, but it was thought that this area was seminal to the identification of the persisting student. Because it was posited that there might be a type of student, with specific characteristics, who would be more likely to succeed, the literature review covered research dealing with students' attitudes, motivation and qualities such as persistence, hardiness or self-confidence. It also included approaches to study and methods of study. Research from health psychology, where much work has been undertaken on the differences in recovery rates between one individual and another, was included in this area.

This chapter has attempted to identify the demographic characteristics of the part-time adult student, reviewed six major models of persistence or attrition and by summarising the findings of these, has concluded by defining three factor areas for investigation in this study. The next chapter reviews the literature in the three areas and identifies factors that are deemed to be important for persistence.

Chapter 3

Literature Review

Introduction to the chapter

This chapter reviews the literature in the three areas defined at the end of Chapter 2..

Section 3.1 looks at the social and environmental factors that might affect student persistence. These include early educational experiences, parental support and support from a variety of sources, including the educational institution and employers. They also include the management of a concurrent variety of roles. Section 3.2 deals with the traumatic occurrences that may affect students and their strategies for coping with these. Section 3.3 reviews the literature on the inherent characteristics that will help adults to persist and section 3.4 introduces research from health psychology that supports the identification of a group of characteristics that appear to predict persistence. The chapter concludes with a review of the thirty-six factors identified from the literature. As outlined in the research plan in Chapter 1 (p. 6), these factors would form the basis for the qualitative study which, it was then hoped, would refine and validate the conclusions from the literature. There was also a possibility that new factors, not seen in the literature, might emerge from this section of the study.

Section 3.1 Social and Environmental factors

Introduction

The literature reviewed in this section considers the effects of previous educational experience, the pressure of multiple roles for the adult learner and support for the learner from a variety of sources. These factors were highlighted in the models presented in Chapter 2.

Early educational experience

Many adult learners carry with them the baggage of their former educational experiences as well as their experiences in adulthood: -

"A number of the identified problems which pose barriers to persistence exist mainly for those who have such psychological and socio-economic handicaps as being high school dropouts, previous failures, or not being part of an academically-oriented milieu. Those challenges that are relatively particular to second chance learners, include not knowing how to 'play the game', a lack of prerequisite knowledge, a tendency to learn by rote, fragile egos, a lack of academic confidence and a need for social reinforcement in learning" (Garland 1993, p.192)

One of the most important areas to emerge from a review of the literature on social and environmental factors affecting students was that of previous unhappy academic experience. Students entering the OUUK often have lower academic qualifications than those entering other higher education institutions where there is no open access (Woodley et al. 1987) but not only students with low qualifications have had unhappy educational experiences. Lunneborg quotes the story of a girl who achieved excellent O-levels but whose father wanted her to leave school. She took a part-time job to keep herself at school for A-levels and was offered a choice of several university places. Her father refused to sign the application for a maintenance grant (Lunneborg 1994, p.90). Another girl enjoyed school until it became a mixed-gender comprehensive. As an only child from an immigrant Indian family, her cultural background made it difficult for her to compete in the classroom (Lunneborg 1994, p.63). Heron referred to women students who had married at 16; had dropped out of college, and who, frequently, had been told that they were stupid when at school (Heron 1997, pp.39-41). Initial interviews with students undertaken by Lea (1996) as part of a longitudinal qualitative research project revealed that students frequently dwelt on lost educational opportunities. They also spoke of experiences of early gender and class stereotyping that defined their early occupational paths. Lunneborg (1997) found that for many men, it was accepted that they would start work as soon as possible. There was often no money for higher level studies and an apprenticeship was considered to be a 'safer' option for lifelong security. Even for students

who had achieved a high level of qualifications, there is often a considerable time lapse since they have studied.

For all of these adults, the result was loss of self-confidence. According to Lunneborg (1997) for many adults, failing the 11+ examination; a selection process for UK children, now discontinued; left ineradicable scars on both men and women. Given low self-confidence in the area of study, any discouragement, such as a low grade in the first assignment, might dispose students to decide not to inflict any more damage on their self-esteem and withdraw from the course. The courage that must be exhibited to return voluntarily to a situation where they have previously experienced distress of some kind surely points to a degree of personal determination which should facilitate persistence.

Multiplicity of roles

Any adult who embarks on higher education will have to add an extra function to already existing, and possibly more important, roles and responsibilities. There will, however, be differences between individuals based on their existing roles and the way that they choose to manage their student role. For example, there is considerable evidence to show that women, especially married women with children, find that juggling roles causes problems for them. Hibbett (1986) found that married men were much more likely to persist than married women. Examining dropout rates at OUUK, she found that, on award-bearing courses, 86% of married men completed their courses against only 47% of married women. However, as well as indicating that men had fewer family responsibilities, these figures could have been partly explained by the pressure that men feel to seek promotion or higher salaries to support their families.

The constraints of time for study affect both men and women, especially in the current economic climate where job changes and redundancies are on the increase. Blaxter and

Tight, in their study on how adult part-time learners juggled their time, posited three methods of dealing with the constraints of time: -

- Withdrawal from study: often due to illness or caring responsibilities. These students were, in many cases, making a temporary withdrawal only for the duration of a crisis, but for some (usually women), caring for an elderly parent would have stretched into years.
- Alternation or substitution: cutting back on other activities, which included employment, voluntary work and leisure. Blaxter and Tight found that most students claimed to have cut down on watching television, playing sport and visiting the pub.
- Combination or synchronisation: combining studies with work which included studying in the train on the way to work, at lunchtimes or while waiting to visit clients. Men found this easier than women, who had less room for manoeuvre and often felt too tired to combine roles (Blaxter & Tight 1994).

They suggested that the concept of 'lifelong learning' which assumed that study might conflict with employment demands or leisure was a patriarchal view requiring alternation of roles by giving up some leisure interests or cutting down on work. This did not deal with the needs of women, whose multiple roles covered caring, often part-time employment and domestic responsibilities, none of which can be 'alternated'.

"In practice, combination rather than alternation of roles may be the only realistic option, and there will likely be limits on how many roles can be effectively carried at any one time."

(Blaxter & Tight, 1994, p. 165)

Kirkup and von Prümmer found, in their comparison of women students at OUUK and the West German FernUniversität that women had many more obstacles to persistence than had men. Women had problems with attending tutorials, juggling childcare and study, and in cases where they were also employed outside the home, further difficulties in finding time to study (Kirkup & von Prümmer 1990). Woodley and Parlett (1983) found that in the student's study environment, problems such as illness, caring for children or elderly relatives, changes in employment conditions or increased travelling all threatened student persistence.

Clouder researched the hypothesis that women had more difficulty with time than men did. She claimed that rather than moving from crisis to crisis, women adopted three different strategies in dealing with time pressure. Following Hall (1972) she defines these as: -

- The 'must work harder' challenge, based on the assumption that any and all demands must be met. This resulted in women working at night when everybody else had gone to bed, or getting up early in the morning. There was ample evidence for this method of 'making' time (Heron 1997, Lunneborg 1994, and Lea 1996).
- The compromise: changing behaviour while still refusing to change demands. This involved becoming 'invisible' in study terms such as tidying away all signs of work before a partner or children came home. This behaviour was also identified by Heron, Lunneborg and Lea.
- Moving the goalposts: This seemed to be the least favoured strategy, yet it is the most useful. Clouder describes how one student had involved her daughters during her study (Clouder 1997).

Clouder did not mention women re-negotiating their roles with their partners; in general women tended not to try to do this. According to Castles (1985), this coping strategy was more likely to occur when the woman was herself the daughter of a working mother or when the partner had been unemployed.

However defined, whether in gender terms or otherwise, there can be little doubt that managing time and organising study is a vital skill for adults who are adding another role to their lives. Possession of these skills is likely to contribute to persistence in the part-time adult learner.

Support for students

The literature on support included support from parents, partners and children; encouragement from friends and acquaintances in the student's social circle; help from work colleagues and the interaction with the teaching institution. Received wisdom

indicates that support for an adult learner is essential to achieve the maximum results: it seems self-evident that students need support from their families and there is some research to support this. Garland found that students are more likely to withdraw if they have support from neither family, nor friends, nor work colleagues (Garland 1993).

Kember describes support as a part of Social Integration which is an important factor in his model of persistence. He states quite categorically that: -

"the supportive family is the one which copes with [these] strains by adapting its routines so that there is a time and place for study. Family members take on additional responsibilities to give the student free time to study."
(Kember 1995, pp.86, 87)

Kember's research was initially completed with students from Hong Kong where there might be perceived to be a greater economic reward as a result of obtaining extra qualifications. His later work looked at work, family and social lives and identified three mechanisms for facilitating the integration of students and encouraging persistence. They were support, negotiation and sacrifice (Kember 1999).

Support from family

Parents can have a lifelong positive or negative influence and this does not only apply to childhood experiences, when nice middle-class girls were expected to get a 'little' job until they married; or working class boys to get a job and leave school as soon as possible (Lunneborg 1994, 1997). One student said that she started studying with the OUUK because her mother pushed her: -

"My mother quite often sends off for things for me. Sometimes it's tea towels, sometimes it's the Open University"
(Lunneborg, 1994. p.53)

Another student said: -

"My mother was saying 'what do you want to study for? You've got such a beautiful house and two children...' "
(Heron, 1997. p.75)

Fathers also discouraged or encouraged their children. The fact that in interviews, students often mentioned their parents' views even though they may have long been married with children of their own, indicates how important these views were to the students. Siblings were also mentioned, though less frequently, in both Lunneborg's and

Heron's research. One student was encouraged by her sister, who had just begun to study herself (Heron 1997, p.47); another student was discouraged - she felt that her sister was jealous (ibid. p.39).

The immediate members of the nuclear family, partners or children, constitute the area most researched in the literature on support for adult learners. There was little evidence of children supporting a parent, although both Heron (1997) and Lunneborg (1994) mentioned the 'good' effects on children of a parent who was studying and Heron did give one example of children who could be asked to allow their mother to study for an hour or two. Children might not be asked to help because of the guilt already felt by women who add studying to their other roles and perceive this as being 'selfish' (Castles 1985). Where both parents are working outside the home, children may already be 'helping' routinely. Alternatively, because of the way in which many adult students choose to study, at their place of employment or when children are at school or in bed, a parent's academic work may be 'invisible' to a child.

It was a rather different story when the support of partners is considered. This appeared to vary from downright hostility to total support, although the two extremes of the spectrum were rarely experienced (Heron 1997, Lunneborg 1994). Grace (1994) found, in her research with women undertaking distance learning, that more male than female students were likely to be supported by their partners. Female partners were more likely to help by typing assignments, removing children from the study area et cetera.

It was difficult to quantify partner support as this could be at different levels. Asbee and Simpson examined the types of support considered to be important by Open University students in one UK region. In a survey wholly about student support, there was a rather low questionnaire return rate of 12.6%. Fewer than half of the respondents rated support

from partners/family/friends as the most useful/quite useful form of support. The examples of support/lack of support covered the entire spectrum (Asbee & Simpson 1997).

Heron (1997) and Asbee and Simpson (1997) provided examples of support or lack of support given to students. These varied; extracts from the best support mentioned are: -

"Steve...would call me down when the baby wanted a breast feed and he'd cook lunch for me..."

"he was supportive and he found the money..."

"My husband doesn't expect me to produce a meal, expect me to do the washing. He doesn't expect it of himself, so he doesn't expect it of me.." (Heron 1997, pp.67-69)

"He helped me to keep going when I felt thoroughly fed-up with it all"

"proof-reading...checks my spelling...prints my assignments, sets the video" (Asbee & Simpson 1997, pp.4-5)

There was evidence that partners felt threatened or jealous. Asbee and Simpson identified jealousy as a factor mentioned several times; Heron spoke of 'psychological sabotage' from male partners. Morgan (1991) used a theme of 'education without consent' where women were expected to fulfil their traditional roles and study when their partner was not around. This was regarded by the male partner as support. Woodley et al. (1987) said that students felt restricted by the demands made by their close families as did Kember (1999). Almost half of the adults questioned by Kember (1995) felt that their studying created problems in the home and one third felt that their study time was very much limited by the requirements of partner and children.

There is a difference between support of the emotional variety that raises the self-confidence of the student and the practical support that frees time for study, so a definition of support was problematic. Benshoff and Lewis (1992) in their research which tried to define the characteristics of non-traditional students, concluded that adult learners need different levels of support from their families or friends. Asbee and Simpson (1997) identified three areas of support that seemed important to students: time to study, emotional support and practical help, though these were not defined in any detail. It may

be that the feeling of being supported is a subjective conclusion on the part of the student and that it is this conclusion that encourages persistence

Support from employers and colleagues

The support of work colleagues or managers was sometimes forthcoming and was seen as useful by some researchers. Kobasa & Puccetti (1983) found that the support of a line manager was more useful to a stressed executive than the support of close family members. Sometimes it was even suggested to employees that they take up study and occasionally there was financial help with the costs of the course (Lunneborg 1997, Heron, 1997, Kember 1995).

Some students want to leave their jobs and progress to a new career. In this case, they will not want their employers to know that they are studying, especially if it is in an area that could not be associated with their current occupation. Where a company sponsors students, it is to their advantage to monitor and support their employees, although not all do so.

Support from friends

Friends and acquaintances could be supportive or provide motivation. Heron studied students in the process of enrolling for undergraduate courses and found that there were social reasons given by adults for wanting to study: -

"I mix with other people who have degrees...and I think a lot of the people I mix with think I probably have one, well they just assumed I went (to university).."

"when we went to Dubai, a lot of the women...had taken their formal education with them...and I socialised with these people...I'd always had this feeling of inferiority over education..."

"it was a very powerful feeling that I had been for most of my life in an academic setting...all his friends...had degrees and many of their wives had degrees too, and I had always felt that I was somehow not up to them...I just felt inferior.." (Heron 1997, p.41)

Although these were examples of unwitting motivation on the part of the friends and acquaintances, there are more direct references to help from friends. One student read her

assignments to two friends and if they claimed not to understand them, the student would re-write (Heron 1997).

Other friends were less supportive: -

"I've had lots of negatives from other people, colleagues at work, neighbours, relatives, friends... The men just patronise me, literally pat me on the head and say 'that will keep you out of trouble'"
(Heron 1997, p.72)

Students value the other students they meet with on their courses. Some groups go right through an Open University degree together, forming a self-help group each year.

Kember's review of research on distance learning and part-time students in Hong Kong quoted the following from a student teacher: -

"Yes, I felt discouraged and frustrated and often came close to giving it up when I worked on my first assignment. Luckily the support from my group kept me to stay in the course (sic). I knew that I wasn't the only person to have problems in the first assignment, there were the same problems faced by my group mates as well."
(Kember 1995, p.86)

Support from the institution

Distance learning institutions often encourage students to set up self-help groups and research does indicate (Heron 1997) that adults find these beneficial. By the very nature of a distance learning institution, students will probably be spread over a large geographical area and may have difficulties even in attending scheduled tutorials. Setting up self-help groups may not therefore be an easy option.

The most immediate support for a part-time adult learner or distance education student will come from the tutor or tutor-counsellor allocated by the institution. For students attending a college in the traditional way, their tutor will be available every week, at least in theory. For many distance education students the only real and useful feedback is through written comments on assignments from the tutor. The OUUK asks tutors to give constructive and full feedback, as they would do in a face-to-face situation. It is recognised that adult students are sensitive to tutors' comments and grading, and adverse criticism or negative remarks may discourage persistence.

Scheduled tutorials are not provided by every distance learning organisation. Belawati (1998) researched problems of persistence connected with courses at the Indonesian Open Learning University (Universitas Terbuka) where there were no face-to-face tutorials. Interventions made by letters encouraging students did not help student persistence. Most part-time adult students will have some regular meetings, perhaps on a weekly basis, and there may be an element of compulsion to attend at least a percentage of these meetings. Frequent meetings may provide support that is lacking for distance learners although this is not proven. Research concerning the support provided by face-to-face tutorials is divided between authors who conclude that students' perception of the usefulness of these sessions is minimal and those who state that face-to-face experiences for students are the most important part of their studies (Burt 1997a).

The type of support provided by tutors may be purely academic or more personal support. In a major review of research into face-to-face contact in distance learning, Burt concluded that opinions on its value differ quite dramatically. He claimed that, while tutors perceived their understanding of students' personal problems as very important, the students themselves considered academic support to be of more value (Burt 1997b, p.16). Garland quoted research that identifies inappropriate tutorial help as a factor adversely affecting persistence (1993, p.187). She also found that students specifically differentiated between the tutor's competence in the area of the course content and the perceived supportiveness of their attitudes.

In some cases, results are contradictory. Burt (1997a) examined a 1995 Courses survey of 10,000 OUUK students and found that half of the respondents wanted more tutorials. Students who attended tutorials perceived that they experienced greater benefit from their courses, although it was unclear that the tutorial actually caused the benefit (Burt 1997a).

Implicit in many of these studies was the conclusion that the personality of the tutor and the care taken to forge a positive relationship with the student was most important.

Summary of social and environmental factors

This section has reviewed factors such as the effects of early educational experience, the need to organise time for study and, if necessary, juggle roles to 'make' time. It has also looked at the influence of social groups and, most importantly, support for the adult learner. It seems that early educational experience, especially if negative, can have an adverse effect on adults but can encourage others to overcome their early experiences. Whether adults take the step of entering higher education despite early 'failure' could depend upon other characteristics, either learned or innate.

The ability to juggle roles to organise and 'make' time for study seems from the research to be a hard-won skill. It is possible that there may be gender differences between the ability of men and women to organise their study and this might depend upon their various roles and circumstances.

It seems that most research has been content to identify support or lack of it, but not to define support, nor to seek to discover *how* it affects persistence in adult learners. In general terms, the evidence may point towards the need for women to be helped at a more practical level in their various roles than men, who seem more accustomed to being supported by their partners as part of their pre-student lives. More research into the meaning of the term 'support' is needed, and more investigation of exactly what students perceive as support. The literature reviewed does not reveal with any clarity the most important 'supporter' or 'supporters' for adult learners, or the optimum methods of support that might be offered, but the research sends a clear signal that support is important to adult learners and will encourage persistence.

Support is of course most urgently required when sudden crises arise in the life of the student and the next section looks at some of the traumatic factors that can affect student learning as well as the strategies that may be adopted for coping with crises.

Section 3.2 Traumatic factors

Introduction

This section reviews research into the effect that traumatic events may have on persistence in part-time adult learners during their study careers. These events may be the exceptional crises such as bereavement or redundancy, or the day-to-day grinding stress that affects some individuals. In this report the term 'stressor' is used to describe any occurrence that causes or is perceived to cause pressure or tension in an individual. The section also deals with coping strategies, and suggests that some kinds of coping are more likely than others to encourage persistence.

Common causes of stress for students

At a recent regional staff development event for the Open University (April 2001, Belfast) tutors discussed the reasons given by students asking for time extensions for the submission of assignments. Open University tutors can give students up to 21 days extension past the cut-off date. This allowance is to be made in 'exceptional circumstances' but these circumstances are left to the discretion of the tutor who knows the student.

The stories divided neatly into those that were covered by time pressure or work/family pressure: -

"I've been awfully busy at work - two of the team left..."

"I had to go away on business and I've got behind with the reading..."

"We're going to Gran Canaria and I haven't got time to finish the essay and pack, and arrange everything..."

and those that reflected more immediate and tragic circumstances. Some of these were

outlined by the tutors: -

"I've got a student with MS (Multiple Sclerosis) who works part-time in a voluntary organisation - she's just given birth to a still-born baby."

"One of my students - I knew she was getting married shortly - rang for an extension because her fiancé had gone off with her best friend (and chief bridesmaid) a week before the wedding."

"One of my best students...was thrown out by his wife, which left him with nowhere to live, and then his wife made a bonfire of all his OU stuff in the garden."

Of these six students, the three who had suffered truly traumatic experiences all finished the year successfully, whereas two of the first three dropped out, neither submitting their assignments nor attending the examination. The student who was going on holiday finished successfully. There was some discussion amongst the tutors on giving extensions to students who were 'just going on holiday' but one of the women commented that a family holiday *was* important and in all probability the student felt guilty enough about withdrawing attention from the family during the rest of the year.

Adult learners, the majority of whom are in the age range of 25-49 years, may be at a stage of life where they have to deal with frequent traumatic changes at various levels. Illness of family or self, early deaths of friends and relations, losing or changing jobs, problems with children are all common occurrences. Individuals will also be affected by these happenings outside the nuclear family; problems with extended kin and social group stress can also have an effect. Adapting to change is a hard-won skill for many adults.

It is also important not to under-estimate the effect of on-going day-to-day stress, for example, the 12-year old who asks for £1.50 as a contribution towards a school outing, "and Miss says she won't have change...". This demand will normally be made as the entire family is leaving at the last possible minute for work and school in the morning.

For part-time adult learners, these 'small' stressful happenings can affect persistence. Bird and Hailes (1996) examined cases of students who had dropped out of the Open University because of administrative difficulties. One had missed summer school through illness and

failed to realise that she could have claimed excusal after the event, and another turned up at the wrong examination centre and did not know that he could submit a 'disadvantage' form to the Examination Board. In both cases, the students had not read the relevant instructions carefully which in itself might point to on-going stress.

The effects of stress on the individual

Lazarus and Folkman (1984) identified 'daily hassle' as a type of stress that may be most important in people's lives. They maintained that it was important to cope with this stress through adaptation and that this was necessary for good health. They defined psychological stress as: -

"a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being."

(Lazarus and Folkman 1984, p.19)

They claimed that when any new threat arises, an individual will appraise the likely damage and try to categorise the various factors involved. The perception could be either a threat of harm or loss, which allowed for anticipatory coping; or of a challenging situation, where the focus was on possible gain or growth which might be inherent in the situation. They suggested that threat and challenge are not mutually exclusive and an adult learner approaching study with a mixture of terror and anticipation could exemplify this. They also believed that a high level of commitment and self-belief were necessary for successful appraisal. This echoes studies on persistence and withdrawal in the field of adult learning (McVey et al. 1996, Dillon & Blanchard 1991, Kember 1999) which have emphasised that the more self-confident the student is, the more likely s/he is to persist.. Lazarus & Folkman further stated that the greater the commitment to a course of action, the more stress will be suffered by a threat to that action. They pointed out that once a commitment has been publicised, the person committing will suffer greater stress if a threat to the commitment is perceived. This might help to explain why some students keep secret their enrolment for study and also perhaps why they may choose distance learning instead of part-time traditional classes.

Lazarus and Folkman identified different types of stress; chronic intermittent events, such as on-going financial problems or conflict with family members; and acute time-limited events such as examinations or minor surgery. It is easy to see how these two types of stress could coincide with traumatic results for the adult learner. An argument with a teenager on the night before an examination might merely reflect an on-going tussle with a recalcitrant child but the timing of that particular quarrel might cause considerable stress to the learner.

Lazarus and Folkman quoted Brown and Harris' categories of the different methods of appraising extra stress: -

- "Oh No, not another thing going wrong!" is a familiar feeling to everyone but individuals have to *believe* that this is the last straw. A new stress may in fact increase the appraisal of other stresses which had hitherto appeared less threatening. When adult learners accept yet another role or task in their lives, they are increasing the likelihood of the occurrence of stressful events.
- What is stress to one person may not be to another. For example, an assignment grade of 60% may be disappointing to one student but may make another very happy.
- Seemingly unconnected events can cause stress; a puncture on the way to a tutorial can cause a student to feel unable to cope with an assignment. The links may not be obvious to the individual. When a chain of unlucky events occur, people can begin to question their general competence or blame bad luck. This can lead to any event, no matter how small, causing extra stress.

It can be seen that there are many ways in which stress can affect persistence, although these depend upon individual differences. For example, an individual in a hated job may suffer less stress when made redundant than someone who enjoys the job. The presence or absence of a dependent family may further compound this situation and influence the individual's stress levels.

Lazarus and Folkman identified the following resources that help people cope with stress: -

- health and energy (makes things easier - sometimes)
- positive self-belief (in own powers and values)
- problem-solving skills (information-seeking, analysis)
- social skills (interpersonal)
- social support
- material resources

(Lazarus and Folkman 1984, pp.159-164)

Stressors that may be specific to adult learners

It is possible to identify what causes stress in learners. Evidence has been collected through surveys of both continuing students and those who drop out, as well as more indirectly as a part of qualitative research. Peters (1992) reported on a study carried out in the FernUniversität of West Germany with students who failed to re-enrol. Students were asked to give reasons for dropout, and, in the first eight categories given, 59% cited change of job and job stress; 33% too much stress from family, household or children and 22% found the physical and mental stress too great (Peters 1992, p.261). Jegede and Kirkwood (1994) in a study of anxiety suffered by Australian distance learning students found that there was a high level of stress regarding course content, financial pressure and readiness to learn. An opinionnaire administered together with the main research instrument asked learners what they thought had affected their studies. Students identified the three factors isolated in the main study and added two more - time and employment pressures.

Qualitative studies identified more stressors. Garland's model of barriers to persistence, reviewed in Chapter 2 of this study, used an ethnographic approach with 47 distance learners in Canada. Her sample comprised both dropout and persistent students and she was able to identify similar anxiety problems with both groups. Both groups seemed to recognise the same barriers to effective learning but the area in which the groups differed was in being in control of the situation. More of the dropout students felt that their situation was hopeless and that they had no control over their problems (Garland 1993).

The students admitted that they worked under stress and this seemed to be linked to the multiplicity of their roles. This differed from pressure of time which was also exacerbated by multiple roles. Garland concluded that: -

"The problem of stress seems to have two aspects; the stress of their normal roles, often increased by the new role of student and its demands; and the stress of study itself." (Garland 1993, p.190)

Heron (1997) also mentioned the multiplicity of roles for women and how this caused stress and anxiety. Her research subjects mentioned 'guilt' at giving less time than they 'should' to the home and family, and she said: -

"Each private (family) and public (university) institution demands responsibilities which are task - not clock - determined, and each demands not only physical but mental time." (Heron 1997, p. 59)

Lunneborg's (1994) study of Open University women identified fear of academic tasks, in particular writing assignments. This stressor was common to the 14 women she interviewed. When she came to repeat her study with Open University men, she discovered that the main areas of stress were equally to do with academic beginnings, but there was also a large amount of employment-related anxiety

A picture emerges of pressure on students that is linked to the values of a traditional patriarchal society. Despite the changes in family life and social structure in Western society, gender-based roles still persist. Men still suffer pressure from their employment and women still have anxiety and guilt caused by the demands of home and family. This picture is supported by the work of Kirkup and von Prümmer (1990) and Lentell (1998). The difference today is that many women now have added the 'male' pressure of employment outside the home to their traditional roles.

Research on stress has been carried out almost exclusively by self-report and a major problem has been to identify the level of stress suffered by individuals. Levels of stress have been tested physiologically but this is obviously not an option for large numbers of people and, by definition, may produce an intervening variable effect. What is clear is

that stress affects people differently and it seems to be the way in which individuals manage their stress that will affect persistence.

Coping with stress

It is clear that some people cope better than others with stress and this might be partly dependent on support and friendship during potentially stressful periods. However, Kobasa and Puccetti (1983) found that research subjects suffering from stress at work were actually more at risk of stress-related illness if they had total support from their families. Their research concluded that an ability to cope with stress was more important than support.

There are also differences in the way that a person chooses to cope with stress and it is perhaps these differences that will define success or failure for the adult learner.

Lazarus and Folkman (1984) identified a range of coping methods from avoidance to consultation to decision-making. They also commented that some people grow through coping with stress and that some people actively seek stress. Amirkhan (1990) undertook a research study in a small town in America that used an inductive approach to ask respondents to describe a recent stressful event and how they had coped with it. Subjects, having described their problem, had to select the approaches used to cope with the stress. Amirkhan concluded that only three of the reported approaches were statistically sound: problem-solving, consulting with others and avoidance.

Carver and Scheier (1994) suggested that there might be differences between coping strategies and coping styles. It is possible to develop a coping style that predisposes the individual to cope in a particular way but this style may not always be appropriate in different situations or even at different stages of a specific situation. Thus, someone with a rigid adherence to a particular coping style may not have the adaptive flexibility to deal competently with different types of stress. They examined the various coping mechanisms

used by college students before and after an examination. They concluded that self-confidence was the most important factor in dealing competently with stress. Výrost (1997) and Lovaš et al. (1997) suggested four categories of coping as acceptance, avoidance, consultation and independent decision-making. Acceptance and avoidance are different in process, but similar in outcome, in that individuals do not feel confident enough to tackle their stress or try to reduce the level. Výrost (1997) posited a relationship between behaviour traits and behaviour strategies in what he called 'demanding life situations'. He used quantitative methods to identify 3 methods of coping with stressful situations and correlated these with specific personality types.

The methods of coping were: -

- to try to cope independently
- to try to cope through consultation with others
- to try to cope by escaping or ignoring the stressful situation

Lovaš et al. confirmed the methods of coping through a multi-stage factor analysis of data received from research into a group of university students aged between 18 and 28 years.

They refined the approaches to coping as:-

- "orientation towards independent problem-solving"
- "solving a problem with the assistance of others"
- "an effort to downplay, engage in distraction, escape"
- "passive acceptance of the situation"

(Lovaš et al. 1997, p.9)

The research might be qualified by pointing out that these categories of coping may not be discrete. It would be perfectly possible for an individual to ignore a potentially stressful situation (such as an assignment) until it becomes unavoidable. At that stage it becomes imperative to try either to cope independently, or to consult a tutor or peer group.

Summary of traumatic factors

The research on stress and coping clearly identifies methods of dealing with anxiety by either ignoring the problem, tackling it immediately or using other people for support in making decisions. How individuals identify stress and stressors and how they cope with

these seems to be mediated by the effects of past experiences and perhaps also by differences in personality. The evidence throughout the literature seems to point consistently towards the thesis that effective coping ability is correlated with self-confidence and that this is an important intrinsic characteristic of the persistent individual. However, it is not necessarily logical for even the most confident individual to persist in the face of multiple traumatic events. It may be a much more rational decision to withdraw from study, either temporarily or permanently, in order to cope effectively with more important aspects of life.

The next section focuses on an examination of the intrinsic factors that affect the persistence of part-time adult learners. It includes a short review of an area of health psychology that deals with the phenomenon of why some people recover from illness more quickly than others and examines the inherent characteristics of healthy individuals. On the basis of the literature included in this section, it is postulated that there may be a cluster of significant characteristics that predispose an adult learner to persist.

Section 3.3 Intrinsic factors

Introduction to the section

This section reviews research on the qualities, both learned and dispositional, that individuals possess which will predispose them to enter adult education and remain there until their goal is reached. It looks briefly at reasons for adults to engage with higher education. The section also discusses the literature on factors such as motivation; to start *and* to continue with study; and the characteristics leading to persistence. These are the factors identified as 'entry characteristics' and 'goal commitment' by Tinto (1975) and Kember (1995). They are also included within Bean & Metzner's (1985) model as 'background and defining variables', by Garland (1993) as 'dispositional' factors and by MacKinnon-Slaney (1994) as 'personal issues'. The section continues with a review of the literature dealing with students' approaches to studying, included in all six models

reviewed in Chapter 2. The section then considers what the literature on health psychology can add to the understanding of persistence in higher education and this research deals with optimism, locus of control, hardiness as a characteristic and a sense of coherence. Next a summary profile of the persistent adult learner is provided. The final section summarises the literature review and presents a diagrammatic representation of the findings from each of the areas of social and environmental, traumatic and intrinsic factors.

Why do adults undertake higher education?

The goal may not be a degree or a qualification. A study by Hales (1991) of Associate students at the OUUK found that 37% were studying because they were interested in the subject, 22% thought it would help them in their careers and 13% thought it would be useful in their work (Hales 1991, p.6). In an examination of students who dropped out of courses over a five year period, Bird and Hailes (1996) found that 93% of the students had found the experience worthwhile. The majority said that the experience had been good and developed their desire to continue learning.

The adult learner's goal may not be concerned with intellectual development at all. Kerka suggests that adult learners may drop out when they feel their goal has been achieved, or they may 'stop out' -

"attending, withdrawing and returning is typical of adults who must place the student role on the back burner temporarily. Counting them as dropouts would be misleading" (Kerka 1995, p.1)

Backman (1988) identified three categories of motive applying to adult learners; motives connected with working life, general education and motives of a purely social nature.

Research on motivation in education tends to be divided between work on reasons given by students for returning to study, mostly external reasons which are obtained through questionnaires; and work on the recognition of particular personality traits or dispositions which provide intrinsic motivation and encourage persistence in learning, often collected qualitatively through interviews. The dichotomy between these views may be due to the

methodology used. Harrison suggested that the use of surveys, while dealing in large numbers and appearing to be comprehensive, might miss the most important factors of learners' attitudes and self-perception -

"by using pre-arranged categories as a way of organising and comparing responses, limitations are imposed on the range of experience that can be recorded" (Harrison 1993, p.12)

When adults are asked about their motives for study, there is a considerable degree of consensus in their replies. Despite major differences in survey layout and questionnaire items, the most popular reasons for returning to study are employment-based (Benshoff and Lewis, 1992; Brown, 1986; Fung, 1995; Waniewicz, 1982). These results are borne out by Jarvis (2001), who suggested that the motivation to learn and take part in higher education was a symptom of a much larger social change in the global economic society. This change requires workers to continue to learn throughout their working career although the learning must be directly applicable to their career. This might well provide an important external motivation for adult part-time learners.

However, these conclusions do not explain why some adults never become involved in further education or training, despite being aware that this would be beneficial for them. It seems likely that there may be innate characteristics or learned experience that will motivate adults to learn.

Motivation and adult learners

Henderson and Nathenson (1994) reviewed theories of adult learning and looked at models of motivation. Henderson pointed out that Maslow (1970) believed that motivation could not be tested empirically. Henderson quoted Maslow:

"It [the study of motivation] needs a life situation of the total human being in his social environment" (Maslow 1970, quoted in Henderson & Nathenson, 1994, p.25)

Henderson concluded that Maslow believed that it was necessary to rely on interpreting what people perceive their motives to be (Henderson & Nathenson 1994). This conclusion seemed to indicate that individuals have only one motive for each drive or

need, whereas it is quite likely that undertaking learning could have more than one desired outcome, e.g., to improve career prospects and also because the individual enjoys learning. Deci suggested that what motivated adults was information from the environment, their own memory and their internal needs. By processing this information, adults can conclude that they need to obtain a specific type of satisfaction. He stated that adults need to feel that they are competent and in control of their environment. This need stimulates behaviour and the adult distinguishes between the choices that will lead to satisfaction.

He defines two general types of intrinsically motivated behaviours: -

"When there is no stimulation, people will *seek* it. A person who gets no stimulation will not feel competent and self-determining;So he seeks out the opportunity to behave in ways which allow him to feel *competent and self-determining*. He will seek out challenge. The other kind of intrinsically motivated behaviour involves *conquering* challenges or reducing incongruity. Only when a person is able to reduce incongruity...[and] conquer the challenges ...will he feel competent and self-determining."

(Deci 1975, p.61)

This particular theory seems to cover not only the initial motive to join a course or programme but also the impetus to continue with it until the perceived goal is reached.

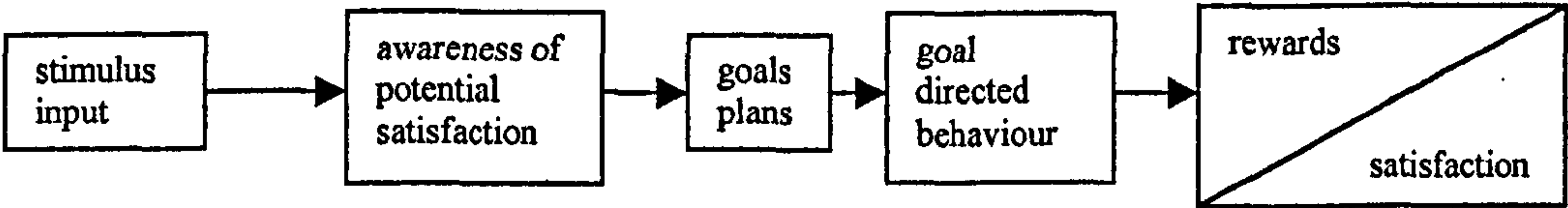


Figure 3.1 – Deci’s model of motivation (Deci 1975, p.98)

This has implications for adult learning as Deci claimed that intrinsic motivation decreases as the individual's feelings of competence and self-determination increase. So for some adult learners, completing part of a course or programme may provide them with the satisfaction they require. If a student has learned enough to feel competent halfway through the course, that is a legitimate point to leave, having received the necessary reward. This can be illustrated by the following example based on Deci's work: -

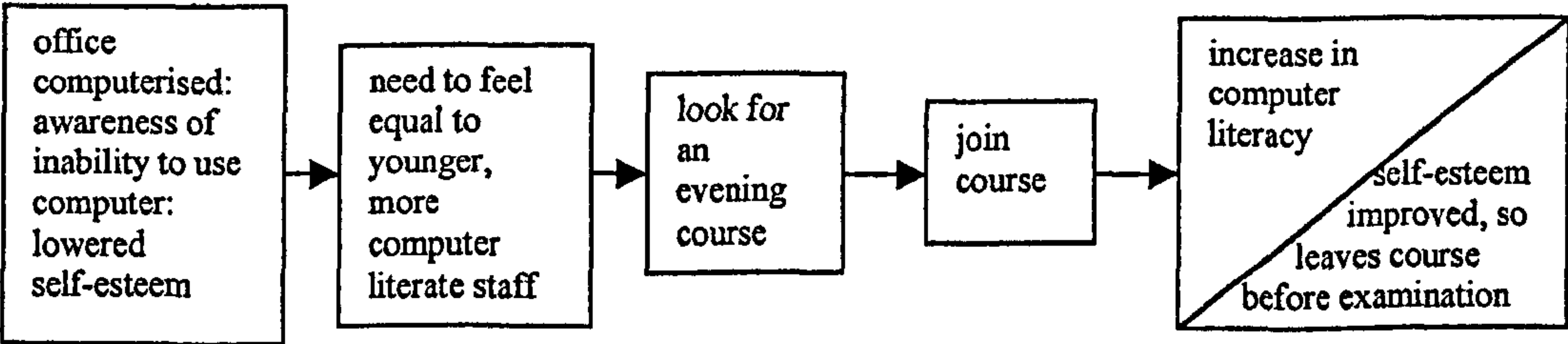


Figure 3.2 – example showing possible motivation for an office supervisor to update knowledge

Individuals will also have to make decisions about the *way* in which they can achieve their goals. For example, a woman with low self-esteem may prefer to take a distance learning course rather than 'expose' herself to classmates in a face-to-face situation. She might also choose a lower-level course than necessary to ensure that she will be successful, thus entering the further rather than the higher education sector. Deci also claimed that external reward could decrease intrinsic motivation. If an adult learner feels more competent and has gained a better job, or been promoted as a result of studying, intrinsic motivation may decline, leading to dropout from courses. If, on the other hand, study has not been externally rewarded, this may act as an incentive to continue studying. Although Deci's theory is appealing in that it may partially explain some student dropout, it is hardly sufficient by itself to account for all lapsed students, especially the large numbers who drop out before or near to the start of a course.

While Tinto (1975) states that clear goal commitment is required for persistence and Bean & Metzner (1985) include goal commitment in the psychological characteristics of their model, it seems that motivation for the adult learner may be more complicated than commitment to a specific goal. There may be more important factors or groups of factors that encourage persistence.

Characteristics needed for persistence

The dictionary definition of persistence given in Chapter 1 of this study refers to being determined, which an adult learner would require to be, perhaps above all else. A determined character must be important in students who voluntarily give up their free time, if not other activities, to enter higher education on a part-time basis with the likelihood of a wait of some years before achieving their goal. This requires resoluteness and a capacity to calculate benefits and make difficult decisions about their future, often from a position of uncertainty and an awareness that other family members may also have to make sacrifices.

One characteristic which is commonly quoted in research into persistence is confidence. McVey et al. (1996) found that personal confidence in ability to complete the course was an important factor for adult part-time learners undertaking a degree course at Queens University Belfast. They also found that students needed to maintain a positive attitude towards the course and its potential benefits and an ability to sustain their enthusiasm over a prolonged period of study (six years). Alsagoff & Dasuki (1988) examined success and failure for students at Univeristi Sains Malaysia and found that there were significant differences in achievement between students who were confident and those who were not. Confident students were much more likely to succeed. Hibbett (1986) claimed that an examination of adult part-time students at Luton College, England, found that persistent learners expected fewer problems, and had fewer problems, with their study than did students who dropped out.

Gibson (1991) found that confidence was an important factor for women on a part-time external degree course and that barriers to the growth of confidence could be either environmental (e.g. family support) or a result of poor interaction with the institution. She claimed that self-confidence could be damaged by a lack of familiarity with the process of learning, inability to juggle multiple roles, failure to contact the tutor for help (not wanting to bother them or feeling stupid), and poor study skills. Personal success and a feeling of progression would increase self-confidence:

"success does wonders for confidence, it appears!" (Gibson, 1991, p. 210)

Studies into persistence often try to identify clusters of characteristics and attempt to sum these into the type of personality that would be successful as an adult learner. Gatz (1985) identified five factors which were important for persistence in distance learners. They were: -

- significance of course to perceived goal
- appropriateness of independent method of learning
- feasibility of time available to learn

- integration of interests and background for context of learning
- accommodation of learning style needs

She also identified time management skills and organisation of study as important, but concluded that the perceived significance of the student's goal was the most important factor. Atman (1985), working at Pittsburgh University, identified time management, stress coping skills, determination and the ability to set goals as characteristics necessary for distance learners. McVey et al. (1996) found that, in addition to having confidence, part-time students needed: -

- support from the family during the course.
- sufficient financial resources to finish the programme.
- an absence of major domestic crises such as serious illness, bereavement or marital breakdown.
- an absence of serious problems relating to employment.
- the ability to manage time effectively and organise a balance of study, employment and family responsibilities.

Coldeway (1980) used quantitative methodology to test the significance of various factors that might affect adult distance learners at Athabasca university. He found that success in study encouraged persistence and that students with previous academic experience also were more likely to persist. Ostman et al., in an examination of dropout rates in New Zealand in 1988 suggested that managing time is one of the factors most likely to contribute to student persistence. They also suggested that tutors with positive attitudes, who gave students speedy feedback, encouraged persistence and that students who were able to see a relationship between their life goals and their educational plans were more likely to persist.

Urzainqui Dominguez (1996) concluded that students needed to be 'adult' which he defined as having a sense of responsibility, feeling autonomous, controlling impulses, being aware of others' feelings and able to direct their own lives. This cluster of characteristics echoes

MacKinnon-Slaney's list of personal issues, which includes self-awareness, willingness to delay gratification, clarification of career and life goals and a sense of interpersonal competence. (MacKinnon-Slaney 1994 p. 269)

Garland (1993) identified time management problems for both persistent and non-persistent adult learners. Managing time was a characteristic that she thought seminal to success. She also reported a need for achievement in adults and identified problems with academic self-confidence, which might come from previous academic failure or an inability to utilise academic modes of learning.

The literature reviewed indicated that researchers have postulated a series of characteristics that may contribute to persistence, as well as some factors that cannot strictly be so called, such as the possession of sufficient financial resources to complete a course.. The inherent characteristics that appear to be well documented are:

- Confidence and self-belief
- Being 'adult' e.g. having a sense of responsibility and being self-directing
- The ability to organise study and manage time
- Having a perceived goal

Other factors that seem to be important for persistence are: -

- Sufficient financial resources to pay for the course
- An absence of major crises during study
- A positive attitude from the tutor or organisation
- Support from the family

The approach to learning

In order to succeed in study, however, the adult learner must develop and/or use an approach to learning that will be approved by the teaching institution. The institution has a major part to play in supporting and developing the adult learner and there is

considerable discussion about how this can best be achieved or, indeed, whether an appropriate approach to learning can be developed at all.

For a new adult student, it is arguable that the ability both to study and manage time will be one of the first and most important areas of learning. The management of time should help to control the stress of adding another role to an already busy life and has in fact been correlated with academic success (Bernt and Bugbee Jnr 1993). They studied attitudes towards study and measured these against 'high achievers', 'low passes' and 'fails'. They discovered that the first two of these categories correlated significantly with good time management.

How people learn is arguably one of the most researched aspects of human behaviour and studies go back over a hundred years. The approach to study in this century has varied, from 'teaching' individuals how to learn, to considering cognitive patterns of learning. When Entwistle and Wilson reviewed research literature on academic success in 1977, they concluded that there was no necessary correlation between high ability and academic success. They suggested that there were intervening variables such as personality or level of interest.

Gibbs (1980) summed up the work of the Study Methods Group in the Open University in a paper on helping students to learn. He claimed that study habits are based upon the way in which a learner approaches study, rather than being learned before study begins.

Efficient learners remember the sense of what they have read rather than the words and sentences, but effective learning depends on semantic coding and understanding. He concluded that preparing students to learn should be based on their orientation to, and understanding of, learning.

There is evidence that students' approach to learning may change over time. Beaty and Morgan (1992) undertook a longitudinal study of Open University students in order to

analyse the development of their learning as they progressed through the degree programme.. They found changes in confidence, competence and control in learning over the six years leading to graduation. They developed a model of stages of development that linked increasing sophistication in learning to the development of confidence.

Entwistle (1996) has defined three separate approaches to learning and their features as follows: -

- **Deep approach**

Intention - to understand ideas for yourself
by

relating ideas to previous knowledge and experience; looking for patterns and underlying principles; checking evidence and relating it to conclusions; examining logic and argument cautiously and critically; becoming actively interested in the course content (*reflecting*)

- **Surface approach**

Intention - to cope with course requirements
by

studying *without reflecting* on either purpose or strategy; treating the course as unrelated bits of knowledge; memorising facts and procedures routinely; finding difficulty in making sense of new ideas presented; feeling undue pressure and worry about work

- **Strategic approach**

Intention - to achieve the highest possible grades
by

putting consistent effort into studying; finding the right materials and conditions for studying; managing time and effort effectively; being alert to assessment requirements and criteria; gearing work to the perceived preferences of lecturers

(Entwistle 1996, p.101, Table 10.1- italics added)

In defining understanding, Entwistle suggests that: -

"the essence of understanding is the connection between new ideas and what a person already knows"
(Entwistle 1996, p.102)

It therefore followed that understanding was a unique cognitive experience constructed by each individual learner. He further discovered that there was an emotional dimension to understanding which encompassed confidence and flexibility in utilising learned material.

He listed the general experiences of acquiring understanding as:-

- feelings of satisfaction (*about learned material*)
- meaning and significance (*fitting into experience*)
- coherence, connectedness and 'provisional wholeness' (*understanding might develop further*)
- irreversibility (*of learning*)

- confidence about explaining (*what has been learned*)
- flexibility in adapting and applying (*what has been learned*)

(Entwistle 1996, p.104, Table 10.2,
words in italics added)

It is noteworthy that the ability to learn effectively seems to build confidence and thus encourage persistence.

Morgan (1995) suggested that time pressure due to over-long study texts would make life difficult for learners and encourage them to take a surface approach to study. He advocated the production of materials that would engage the learner in the process of learning. MacDonald-Ross and Scott (1996) acknowledged that many OUUK students had weak reading skills and they concluded that:

"prose difficulty is therefore likely to be a major factor in hindering course completion for students with weaker reading skills" (MacDonald-Ross & Scott 1996, p.1)

They agreed with Morgan in suggesting that if there is so much material that students simply did not have time for re-reading and proper understanding, then they were less likely to persist. Difficulty and length of materials might be mediated by the learner's motivation and interest in the subject area; however the literature does emphasise a need for the student to be able to understand and deal with the learning material.

Lea (1996) concluded that a major problem for Open University students was the experience of academic reading and writing. Students reported great difficulties in the decoding of the course materials and the number of times they had to re-read documents.

This seemed to be more prevalent during the first year of study. As students became accustomed to the required 'language', they found courses easier to understand.

Inability to cope with studying might reflect the student's previous educational experience; but it could also lead to loss of confidence, excessive stress and loss of motivation. There do seem to be indications from the research that students need to be supported in actually dealing with the course material, especially in the first year of study.

The next section introduces research from health psychology which builds upon the thesis that there may be a particular set of characteristics that will encourage persistence in part-time adult learners.

Section 3.4 Health psychology and education

Introduction

The introduction of health psychology into the literature review was the result of earlier discussion with a colleague around research which had shown clearly that individuals who were optimistic and positive were more successful at recovering from illness than those who were more pessimistic about their chances of recovery. If individuals could succeed at one task by being optimistic and positive, then perhaps learners who were positive would also do better than those who were not. Further interest was generated by Taylor's work on optimism. Taylor (1989) contended that the majority of people adopt an overly optimistic outlook on life and their own abilities, and that this leads them to try harder and be more determined to succeed. This persistence and perseverance is more likely to lead to success, thus confirming the optimism. Taylor also said: -

" Moreover, people with high self-esteem evaluate their performance more positively than people with low self-esteem, even when their performance is actually the same." (Taylor 1989, p.59)

It was important, in order to achieve, for people to believe that they would be successful, and optimists made more efforts to set goals, plan their study and anticipate. Optimism was also useful when setbacks were encountered, as the optimist would believe that any problem was merely temporary and could be overcome by extra effort. Beliefs that were linked to optimism were delayed gratification, self-evaluation and rewarding oneself for achievement, noted in MacKinnon-Slaney's (1994) Adult Persistence in Learning Model.

Scheier and Carver (1992) reviewed a body of health-related research that identified positive thinking as important in making people feel better. They further stated that there was proof that optimists not only feel better, but *are* better as a result of positive thinking.

They quoted substantial studies within the health field on post-natal depression, diagnosed breast cancer and post-operative pain. All of these showed statistically significant results which demonstrated that people who were optimistic about outcomes actually recovered faster than those who were pessimistic. Their study on the adaptation of new students to university life showed that optimistic students adapted much better and did much better than pessimists. However, Scheier and Carver concluded that optimism was more than merely thinking positively. They found that optimistic individuals had other personality characteristics such as high self-esteem, a feeling that they would be able to accomplish all that they wanted to achieve and a belief that stresses or problems were challenges which would result in personal growth. When optimists found themselves in an unalterable situation, they would accept this: conversely, pessimists continued to deny that the situation existed. Optimism seemed to depend upon the individual's acceptance that they were responsible for their own lives, and what happened in them, and this internal locus of control was also found in studies on persistence in adult education.

Locus of control

Locus of control refers to one way in which individuals react to life events. Studies on the locus of control in the 1970s and 1980s identified two differing perceptions of causation by individuals. The 'internal' individuals took responsibility for most of what happened to them in life; and the 'externals' believed that forces outside their control would have a considerable effect on their life chances. Lefcourt (1976) believed that the perception of being, or not being, in control was an enduring attitude and could be learned. In evidence he quoted what he described as 'learned helplessness' amongst the black American population where lack of power had become a self-fulfilling prophecy for many people. Individuals with an internal locus of control will feel responsibility for their own achievement. Lefcourt linked internal control with persistence: -

"without an expectation of internal control; persistence despite imminent failure, the postponement of immediate pleasures and the organising of one's time and efforts would be unlikely."
(Lefcourt, 1976, p.66)

If this theory is accepted it means that adult students, who have had negative experiences of education which may have taught them to adopt an external locus of control, can change. This change can perhaps happen as a result of what has happened to them between leaving education and taking up learning in later years or it may be developed by the teaching institution. There is evidence that adult students change and develop, becoming more responsible for their learning, over a period of study (Beaty & Morgan 1992).

Hardiness as a characteristic of persistence

Robustness or 'hardiness' has been researched more thoroughly in the field of health psychology than in education but certain studies undertaken seem to be applicable to adult learners. An active group of researchers has been working since the 1970s on the effects of personality or individual characteristics on physical health (Scheier and Carver, 1992). It is now generally accepted that factors such as a positive attitude, greater understanding and a realistic expectation of what is involved in a disease process will result in faster recovery times for ill patients (Friedman 1991). There is a considerable match between the factors identified by this research and much of the work carried out on adult students and their learning by researchers such as Gibbs (1980) and Entwistle (1996). Entwistle concluded that the student acquiring understanding also gained in confidence.

Kobasa (1979) studied senior executives to determine why some of them succumbed to various illnesses while others remained healthy. Selecting subjects in two groups that had equally stressful occupations, she identified 'hardiness' as a descriptor for the members of the group who apparently dealt with stress competently. She claimed that the hardy executive (the sample was male) had: -

- a clear sense of who he was and where he was going; his goals and values were set and he was confident of his capabilities

- an active involvement with his working and living environment; the world was there to be manipulated
- a sense of the meaningfulness of life
- an awareness of his ability to carry out plans, even if they did not originate with him

These factors seem to indicate that the hardy executive is reflective and feels in control of his environment. In contrast, the less hardy executive had a feeling of powerlessness, meaninglessness and a need merely to acquiesce with any changes in work pattern. The hardy executive was determined to achieve his goals and could be compared to a new and motivated student entering higher education, aware that there would be problems to tackle in the course of her/his study programme. A quotation from Kobasa echoes the literature on stress and coping with stress: -

"He [the hardy executive] is not just a victim of a threatening change but an active determinant of the consequences it brings about.....the highly stressed but healthy person is hypothesised to have (a) decisional control, or the capability of choosing among various courses of action to handle stress; (b) cognitive control, or the ability to interpret, appraise and incorporate various sorts of stressful events into an ongoing life plan.. and (c) coping skills, or a greater repertory of suitable responses to stress developed through a characteristic motivation to achieve across all situations."
(Kobasa 1979, p.3))

This theory also accords with Deci's identification of two types of intrinsic motivation; one based on the idea that individuals need stimulation and will seek it out, and the other based on the need to reduce incongruity (Deci 1975). It also leads towards the conclusion that adult learners may be predisposed to persist because of an innate hardiness which may in part be due to their ability to cope with stress. Kobasa suggests that " a life event is defined as stressful if it causes change in, and demands readjustment of, an *average person's normal routine*" (italics added) (Kobasa 1979, p.2). This definition would certainly describe an adult returning to study.

The ability to consider and reflect on the past and present experiences of one's life may contribute to a feeling that the future can be manipulated in the light of current circumstances. On the other hand, self-reflection might also contribute to a feeling of

helplessness on the part of an individual whose past experiences corroborate feelings of 'being done to' rather than a state of 'doing'. The difference between these two viewpoints may be vitally important in predicting persistence in adult learners.

Van der Pligt (1981) found that individuals also make self-attributions, or explanations, of their own behaviour. When self-attribution is made, it includes an aspect of self-evaluation which will affect their explanation of their own behaviour. It follows that people who evaluate themselves positively are likely to make a positive attribution about the meaning of their behaviour. This self-evaluation can only follow self-reflection, and positive self-reflection may depend on an initial level of positive self-esteem. The evidence in the literature on adult learning does point to learners with positive self-esteem having more hardiness and being more persistent: though this is not absolute; there are also examples of students with apparently low self-esteem succeeding in their studies.

Health psychology and a sense of coherence

Antonovsky has worked in the field of health psychology since the sixties. The conclusions from his research could be relevant to adult learners facing the challenge of study as well as to the consideration of health. From an initial interest in coping with stress, he moved to the production of an overall concept that he called the sense of coherence construct (SOC). This construct has three components and relies on the adult's sense of coherence about life. The components are comprehensibility, manageability and meaningfulness (Antonovsky 1993, p.205). A strong SOC provides an individual with resources to deal with life and is developed through childhood and young adult experiences.

As with Lazarus, Deci and Kobasa, Antonovsky regards comprehensibility as the way in which adults view their lives and life occurrences. If the information received about life is understood as making sense and having structure, then there is a belief that the ability

exists to produce order from challenging and chaotic situations. Manageability is the perception that individuals may have, that not only includes their own feelings of control in life situations, but also encompasses the ability to count upon or trust outside resources. So, if an adult student can count upon sufficient finance to support studies, emotional support from friends and family and educational support from the institution, this increases the ability to feel in control of the situation. The third component, meaningfulness, seems to depend upon *feeling* that life is worth living, that it makes sense and that life's challenges are to be welcomed and faced with confidence. There is a degree of interdependence between these components: meaningfulness could well be shaken by any depletion in comprehensibility, such as a family break-up or failure in an academic task.

Antonovsky contended that the importance of a strong SOC in health terms means that individuals will feel that it is worth while making health-related changes in their lifestyles because of their confidence that they will benefit from these. This could also prove to be a useful theory in the consideration of adult learners, who will need to feel that an investment in study (whether practical, academic or emotional) will provide some benefit in their lives.

He also suggested that the stronger the SOC, the more likely it is that individuals would view difficult or unavoidable occurrences as challenges rather than threats, redefining their positions to enable them to manage life positively. His insistence on the importance of individuals being able to call upon and trust resources from outside is replicated by the results of research into adult learners (Woodley et al. 1987; Garland 1993; Lunneborg 1994; Heron 1997).

Another health psychologist, Friedman, was motivated to wonder why he was dealing with people who were extremely healthy, yet were overworked, fast-moving, and generally exhibiting the life profile that was strongly connected with heart disease. During the late

eighties, he began to research the thesis that there might be a particular personality that provided some resistance to the onset of disease. He identified four types of personality, three of which might succumb to illness more readily than the fourth (Friedman 1991). Friedman acknowledged the importance of genetic inheritance and the effects of the environment: it was only when all other things were equal that personality would play a part in the prevention of illness.

The 'healthy' personality belongs to individuals who have enthusiasm, cheerfulness and are competent and optimistic. These people feel they are in control of their lives and are confident of their abilities. They do not feel they have to be able to accomplish everything in life, but they do as much as they can and are realistic about their capabilities. They have a sense of purpose and a plan for success, though they may not articulate this consciously. Friedman quoted Maslow's writings on self-actualisation, saying that this is the realisation of personal growth and fulfilment. Friedman claims that: -

"emotional imbalance is caused by a mismatch between an individual's internal resources and the challenges of the external environment." (Friedman 1991, p. 96)

Internal resources include family and friends, educational resources, money and might also include factors such as a place in the community, religious beliefs, sense of history and reflective thought.

Although originally the research of Kobasa, Antonovsky and Friedman was directed towards the connection between personality and health, there are similarities between this work and the work of those investigating adult learning. It is likely that the personality that remains healthy is the same individual who will be able to persist in learning. The literature points to self-confidence as being important for adult learners, together with a positive outlook and a capacity for hard work. Sufficient resources and support are seen as necessary for good health and most education researchers would agree that these are also important for successful adult learners.

The successful adult learner

The studies reviewed so far point to elements of a possible profile of a successful adult learner. The successful adult learner will have: -

- competence and self-determination
- motivation to start and continue study and to attain a goal
- self-sufficiency, perseverance and confidence
- the ability to organise study and manage time
- emotional stability and a conviction that s/he is in control of life
- a commitment to study and the ability to view study as a challenge rather than a threat
- the ability to cope with stress by generating solutions
- health and energy, social skills, social support and material resources
- an optimistic outlook on life

This paragon of virtue could hardly fail to be successful in whatever was undertaken, but one important conclusion here is that, with the arguable exception of health and emotional stability, all the other characteristics can be learned or at least improved. Health psychologists would suggest that health and emotional stability are also open to change. A second conclusion is that these characteristics are interdependent; so the ability to organise study and manage time will increase the likelihood of feeling in control, being confident and persisting with learning.

3.5 Summary of the literature review

Introduction

This section summarises the literature reviewed within the three factor areas identified in the introduction to the study: **social and environmental, traumatic and intrinsic factors**. Diagrammatic summaries are also produced to clarify the information and to emphasise the pressures on adult learners. The conclusions that can be drawn from the literature together with the possibility of the existence of other unidentified factors is also presented.

The literature thus far reviewed has covered a range of internal and external factors that may affect adult learners. It was clear that many of the factors were interdependent, but there was no indication of the relative importance of each, nor of the effect one might have on another. So, for example, a student who was confident but who was not getting good grades for assignments might have decided to persist in studying. Another less confident student might have become demoralised and decided not to continue to study.

From the demographic review it was concluded that part-time adult learners were a heterogeneous group. Few demographic differences were found between distance learners and students who attended college on a part-time basis.

The section reviewing social and environmental factors concluded that important factors were: support for the student from a variety of sources, the effect of early educational experiences and the ability to juggle roles, where necessary, to find time to study. There was also conflict with family demands and social life; and parental attitudes were important to many students.

In the area of traumatic factors, family crises were an important consideration, as were chronic family concerns. How individuals approached new crises or additional stress and the coping strategies they adopted to deal with these were critical to persistence.

Reviewing intrinsic factors corroborated the need for a self-confident approach to study, the resources to be able to study and the ability to juggle roles and cope with stress.

Student motivation and a reflective approach to study were seen to be important for success and a cluster of factors emerged as possible attributes of the persistent student.

The characteristics of these students included confidence, optimism, the ability to set goals and accept responsibility for their own lives. Persistent students were more likely to have a sense of coherence about life; they viewed their lives as having structure and order and being manageable in terms of support and other resources. Perhaps most importantly, they

felt that they could face life's challenges with equanimity and confidence. These conclusions from the literature on students who viewed stressful life episodes or changes in circumstances as challenges to be met and dealt with, rather than insurmountable problems, were supported by the findings from the research in health psychology. These health studies also demonstrated that individuals who felt in control of their lives and viewed their illness as a challenge to be overcome were both more likely to recover from serious illness, and also to make a more speedy recovery from acute medical treatment. The contribution of research from the health field, when amalgamated with the studies from education, provided further evidence for the identification of an individual who was, or could become, someone who challenged life and expected to win. This, in turn, supported the thesis that the characteristics of the adult learner were important in predicting persistence.

The literature review was not expected to be totally comprehensive: this would have been a long-term project and another study in itself, especially if health research were to be included. However, it was hoped that representative views from most of the major research areas had been included in the literature search.

Summaries of the major factors identified through the literature appear as Figures 3.3, 3.4 and 3.5 on the following pages. They appear in the order in which the categories were dealt with in the literature review and include all the factors perceived to be important in each of the three areas reviewed in the literature. No attempt was made at this stage to prioritise their significance or even to separate them into similar clusters.

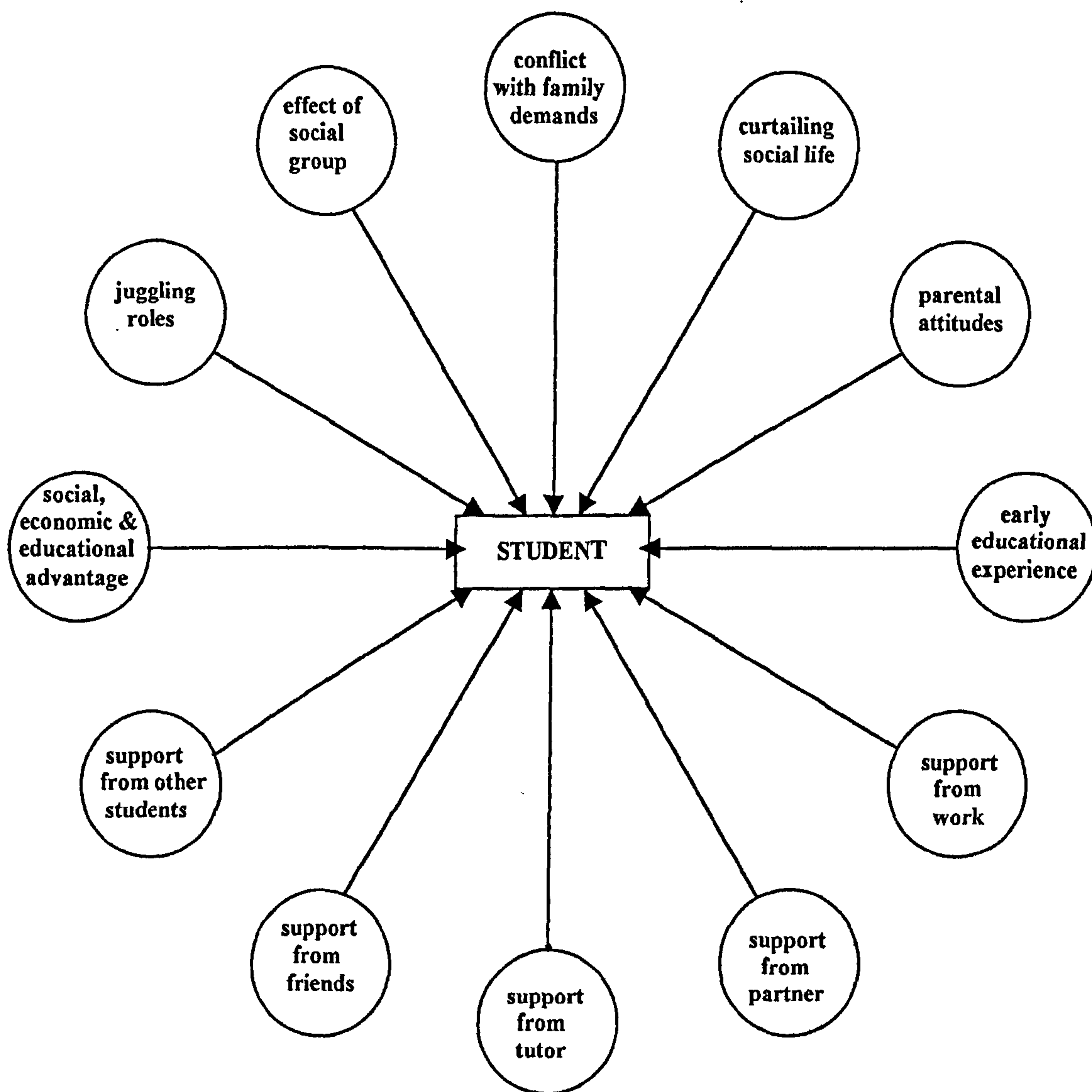


Figure 3.3 - summary of the main social and environmental factors from the literature review

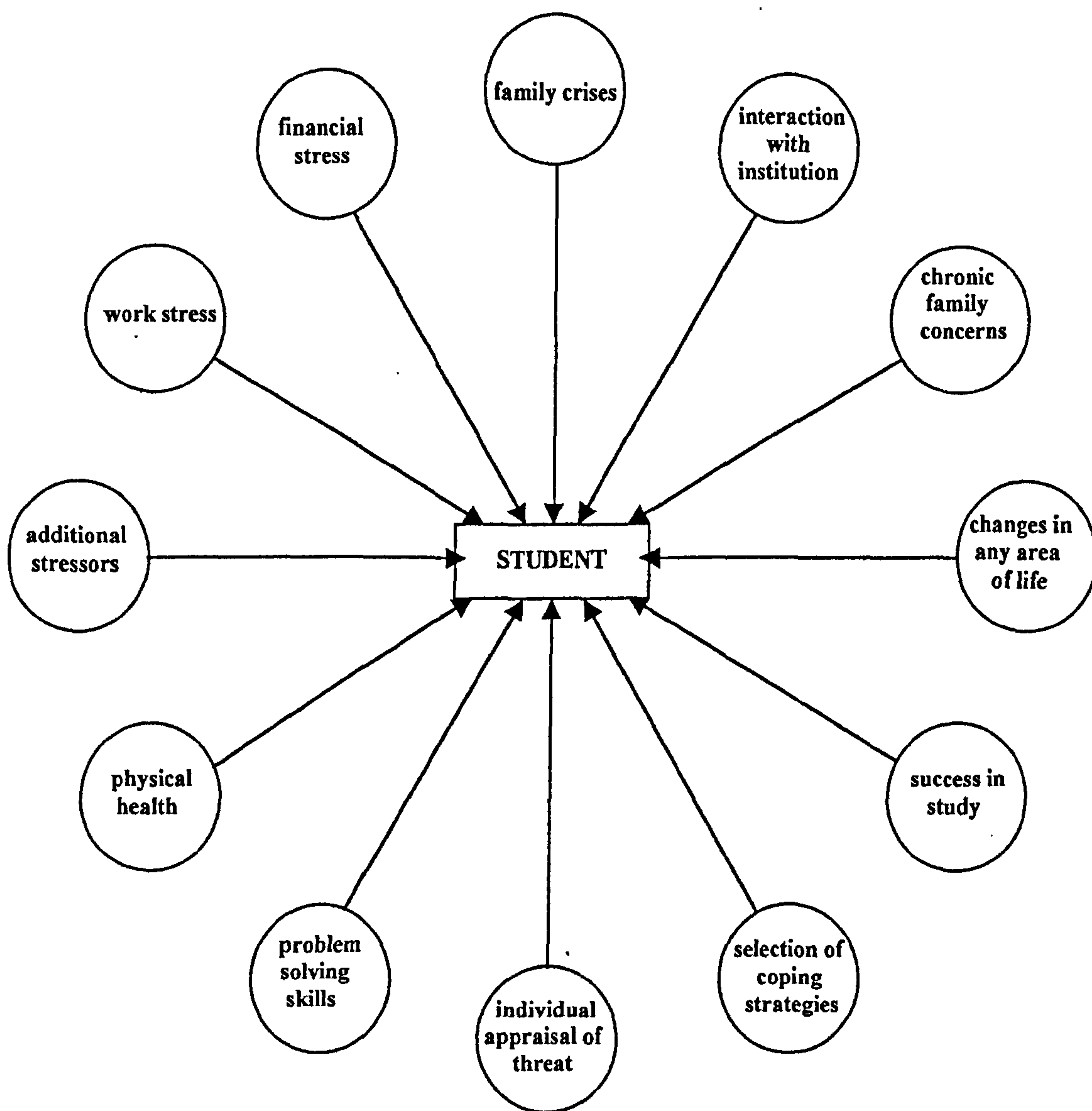


Figure 3.4 - summary of the traumatic factors from the literature review

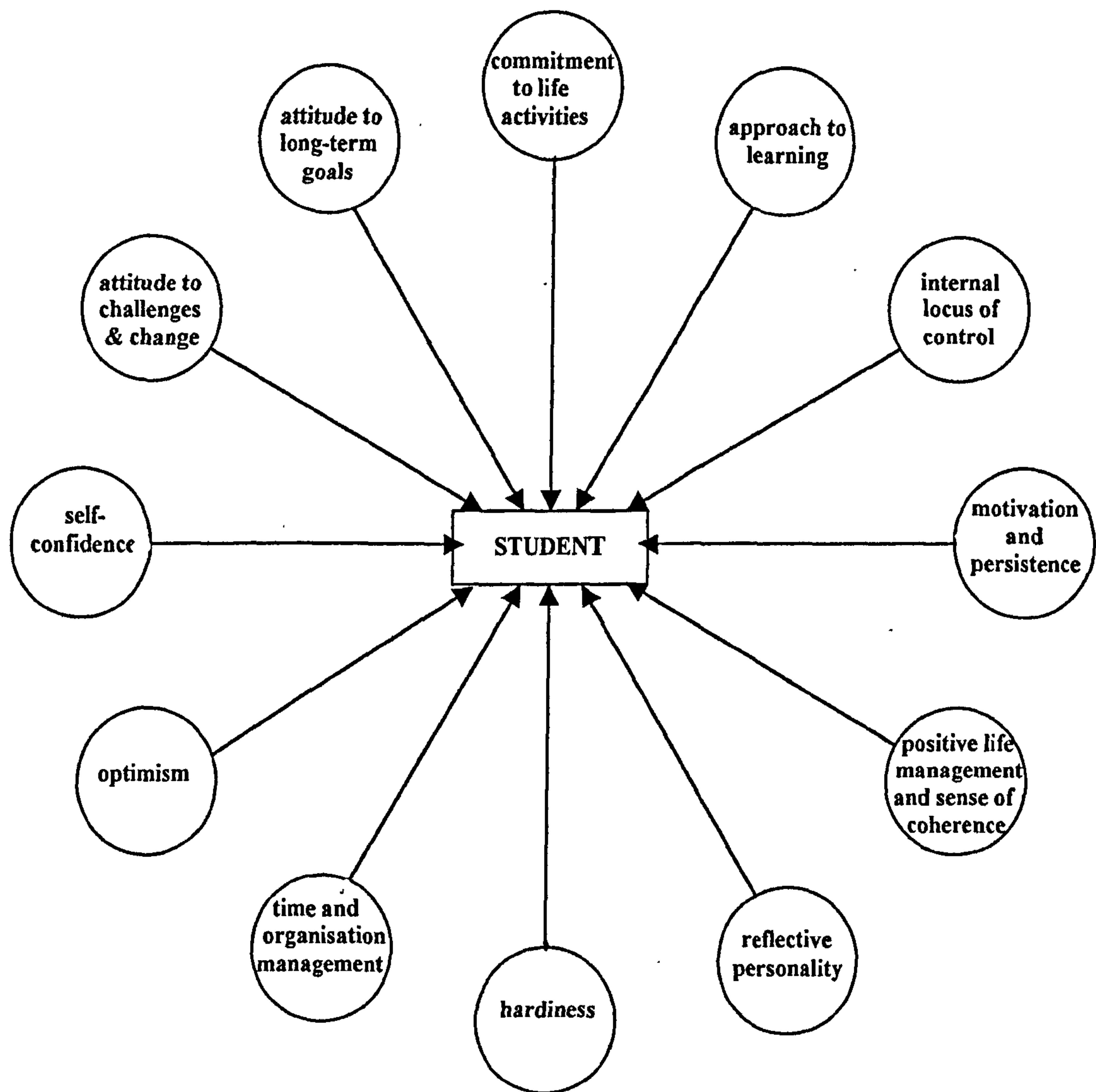


Figure 3.5 - summary of the major intrinsic factors from the literature review

The thirty-six included factors could be divided into three main categories: -

- factors that seem to receive some degree of corroboration through replication of research in the literature; such as the demographic details of the typical adult learner or the requirement for a degree of self-confidence in the adult student
- factors needing further clarification: these may not be replicated or may deal with specific cultural norms that differ from those in the United Kingdom. Kember's early work on family support came largely from Hong Kong students, where the advantages of a higher qualification to an entire family are of such magnitude that considerable sacrifices can be more easily made. Another factor needing clarification is whether there is a characteristic or cluster of characteristics that will pre-dispose a student to persist, such as coping styles or having an internal locus of control. These would be characteristics that might include factors from all three areas of investigation.
- factors that present conflicting information such as the contradictory views on tutorial support. Considerable differences have also been demonstrated between the results of the qualitative studies and the quantitative research reviewed. Work done by Lea (1996), Heron (1997) and Lunneborg (1994, 1997) reveals factors affecting study which have been missed by larger surveys. Examples of this might be the influence of friends (Heron, 1997), the effects of parental attitudes (Lunneborg, 1994) and the effects of early schooling (Lea, 1996).

Conclusion

It was thought that there might also be other factors affecting adult students that have neither been reviewed nor envisaged in previous research. It would be difficult to hypothesise a model or models based solely on literature, especially as much of the research has used quantitative methods which, as Harrison (1993) suggests, may lose a great deal of detail. An example of this might be the many surveys that point to student support from families as being of significance (Asbee and Simpson, 1997; Kirkup and von Prümmer, 1990) whereas qualitative research seems to suggest that there may not necessarily be much support given to students (Heron, 1997; Lea, 1996). As support seemed to be seminal to persistence, it was essential to investigate this factor further before introducing a model.

The most inclusive method of identifying new factors that had not appeared in the literature was thought to be through qualitative methodology and a comparison of the ideas of learners in different situations (Glaser & Strauss 1967). Qualitative field work is expensive in time and travel but it was concluded that interviews with at least some students would help to illuminate what had been learned from the information already gathered. Chapter 4 introduces the qualitative study undertaken as part of this research, describes in more detail the rationale for this study and explains the methodology involved in carrying out the research.

Chapter 4

Methodology for the qualitative study

Introduction

This chapter describes the setting up and implementation of a qualitative study, giving supporting evidence for the rationale for using this methodology from a range of previous research studies. It describes the design of the study and the sample chosen, the implementation of the interviews and the method used for analysis and coding of the data.

Chapter 3 highlighted the need to further examine factors that appeared from the literature to present conflicting information, such as the perceived value of tutorials (Garland 1993; Burt 1997b) or support from family members (Kobasa et al. 1983; Asbee & Simpson 1997). Also identified were factors based on different cultural assumptions such as Kember's (1995) research into Hong Kong students and Alsagoff and Dasuki's (1988) work with Malaysian students. So, to clarify the factors and perhaps resolve some of the concerns presented in the literature, it was decided to set up a qualitative study as a major part of the research. This study was to be carried out with students who had persisted and those who had left courses without completing. It was thought that as the qualitative analysis progressed it might be discovered that some of the findings from the literature could be subsumed to provide a smaller number of factors for the final model. This indeed proved to be the case, as will be seen in chapters 5 and 6. For example, examining the social and environmental factors, where the literature differentiated between different types of support, demonstrated in the analysis of the qualitative research that it was the fact of having support that was seminal rather than the identity of the supporters.

Support for the introduction of a qualitative study

Because the primary focus of this part of the research was on the examination of factors affecting students' study and the overlap and/or accretion of these factors, it was particularly interesting to look at work that had already been undertaken into the effect of multiple factors on students and especially qualitative work that has endeavoured to provide valid and replicable results. This section considered some of the studies that might be pertinent to this research.

Life course analysis or the life history approach has been used for as long as anthropologists and sociologists have conducted qualitative research and participant observation. According to Farnes: - "it was eclipsed with the rise of positivism and survey methodology after the (Second World) war" (Farnes 1992b, p.4) and did not recover its importance until the 1970s.

Survey methods enabled a great deal of information to be gathered relatively easily, whereas life histories depended upon in-depth interviews which were expensive, difficult to analyse objectively and open to interviewer bias.

Rosenmayr (1982) argued that a combination of interview and questionnaire methods was the most efficient means of collecting valid data. He expressed doubts about interviewers' abilities to reproduce identical interview conditions, even after training. This was a matter of emphasis and depended upon the 'theoretical preconceptions' of the interviewer.

He gave an example: -

"To illustrate, some interviewers emphasise daily occurrences, others stimulate statements about value problems" (Rosenmayr 1982, p.45)

Cornwell (1984) in her research into health and illness in women's lives in the East End of

London corroborated Rosenmayr's conclusions. She argued that survey questions (direct questions) elicited what she called 'public' answers, or answers that were perceived as socially acceptable by the respondent. Invitations to tell the interviewer about events tended to elicit 'private' accounts that were much more likely to reveal actual or potential behaviour. She therefore believed that a combination of closed and open-ended techniques increased the validity of the research.

In Farnes' life course analysis of students' lives, he sought to answer four questions: -

- 1) "How can the pattern of students' lives be characterised?"
- 2) "Why are their lives shaped in the way they are, and what is the role of learning?"
- 3) "What factors affect the course of students' lives and why do they react differently to similar events such as a course?"
- 4) "How do social and historical changes affect students' lives and learning?"

(Farnes 1992c, p.3)

To do this he devised a research instrument that included open-ended accounts from respondents and more specific questions to ensure that the same types of data were received for the entire sample. The multiple factors he used were: education; family/marital life; childcare; health; employment; partner's unemployment; community activities and social life.

In the study undertaken using this life history technique, Farnes' sample consisted of women who had taken community education courses with the Open University. The study was intended to review and examine students' lives, where community education fitted into those lives and what influences the courses had on their lives. Although Farnes claimed that a more developed theoretical basis is required for techniques such as the life course approach, he concluded that: -

"Life course analysis shows at what stage in students' various careers they participate; what else is going on in their lives at the time; and how education affects areas of their lives"

(Farnes 1992b, p.16)

Farnes' study provided a valuable insight into the way in which various factors in students'

lives interact to influence their behaviour; and an interview schedule that increased considerably the validity of unstructured interviews. A major problem with this type of research is, of course, the expense incurred in training interviewers, the time taken to undertake lengthy in-depth interviews and the difficulty in ensuring objectivity of analysis.

Farnes' work followed that of a group of social scientists from America and Europe who pulled together their mostly qualitative research on life transitions and the effects of ageing on behaviour and intellect. Their work demonstrated that qualitative research can locate a great deal of useful data for study.

An overview of the group's conclusions added support to the idea that there were multiple factors influencing adult learners (Hareven & Adams 1982). Introducing the text, Hareven said: -

"On the individual level, the crucial question is how people plan and organise their roles over their life course and how they time their life transitions....such as entry into and exit from school."
(Hareven & Adams, p.xi)

In the same text it was suggested that, in an individual's life, the events that were common and linked to the life cycle, such as marriage and children, were meshed with periods of study and employment, as well as with the unplanned events, such as unemployment, divorce or bereavement (Hareven & Adams 1982, Ch 3). He contended that the expected 'normal' life events did not affect individuals' self-esteem, nor cause emotional trauma. It might then be the case that adult learners should not be affected by the ordinary problems associated with their life stages, although this is not borne out by much of the literature.

Hareven and Adams also quoted Plath who posited three influences on people. Firstly the individual's perception of themselves and where they were in space and time; secondly, the circle of family and friends who decided what the accepted norms of behaviour for

individuals within that group were; and thirdly, the individuals' longer-term plans for how they intended to conduct their life (Hareven & Adams 1982).

One model that attempted to measure the concomitants of an individual's behaviour is the model of factors determining a person's behaviour described by Ajzen and Fishbein. The relevance of this model to the present research is that it shows the relative measurements of the factors that impinge upon the individual's decision-making, thus attempting to predict actual behaviour. It also showed that qualitative research can result in the production of a testable model.

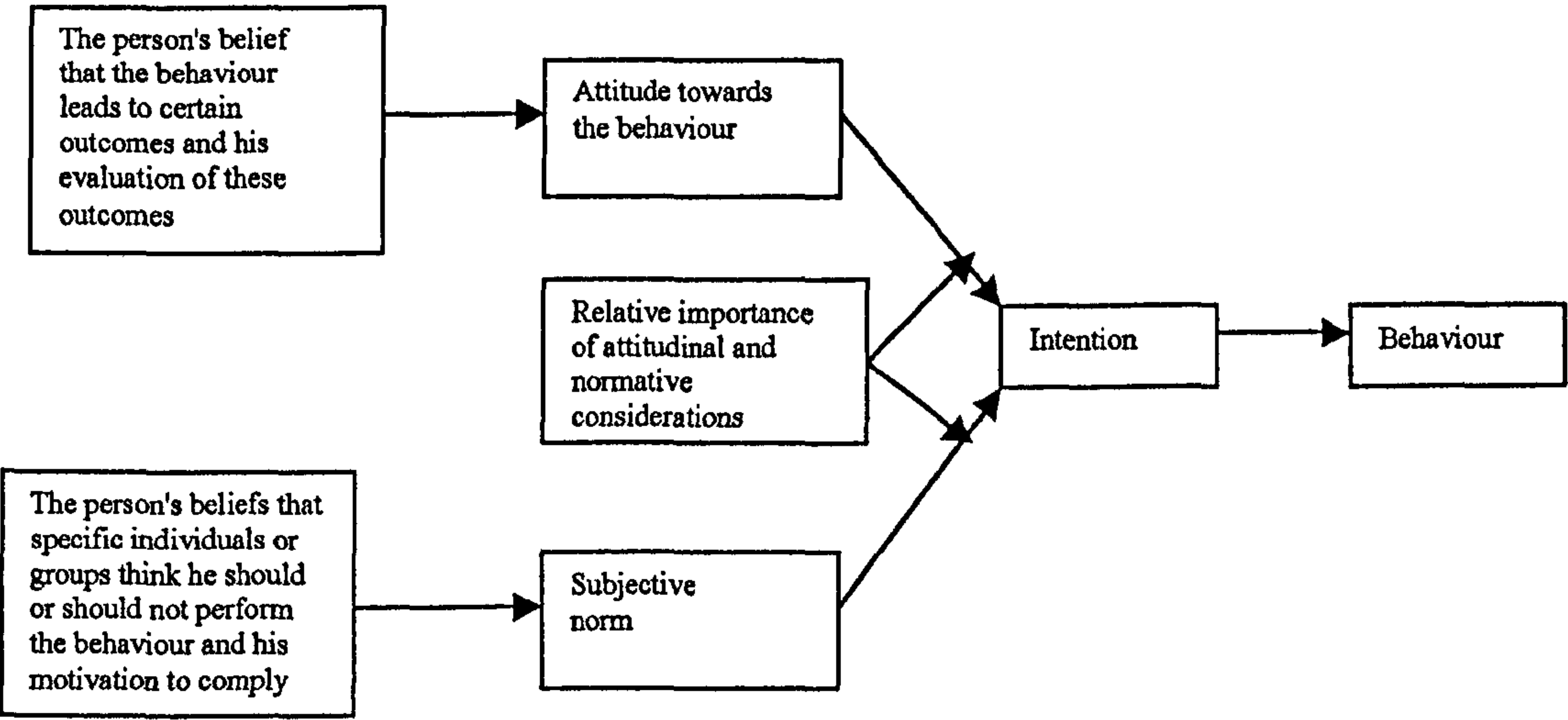


Figure 4.1 – Factors determining a person’s behaviour (Ajzen and Fishbein 1980, p.8)

This model was intended to measure the individual's evaluation of the probable outcomes of a particular behaviour and the beliefs that a range of significant people or groups would approve or disapprove of the behaviour. It did this by setting up a series of indicators or single actions that were considered to be part of an overall behaviour.

In the case of an adult learner intending to study, these might be: -

- reading prospectuses for various institutions
- visiting various institutions
- talking to staff at institutions
- registering for a course
- buying books for the course
- undertaking a preparatory course
- contacting the tutor
- reading preliminary material sent by the institution
- buying a book on study skills

Assuming that these actions give a comprehensive list of behaviours that an intending student might engage in, and that none of them can be given an alternative explanation, it is possible to compute an index of behaviour. Any of the actions that the intending student takes scores (+1), and those that she does not take scores (-1). This is only one way of measuring this variable: it would be possible to measure it by asking the intending student to predict the actions she intends to take and rate these. By using both methods, the measurement of intention would be strengthened.

In similar fashion, it is possible to measure the subjective norm by identifying the intending student's referents, or those individuals or groups that are important to the student. These might be a partner, an employer, children, a friend or a brother. The intending student is asked to rate the opinion of each of these about the desirability of the student's undertaking a course, on a scale from (-3) to (+3). Then the intending student is asked to use the same scale numbers to indicate how strongly she is motivated to comply with each person. The two scores are multiplied together and the result summed, giving a score for the subjective norm.

The scoring might look like this: -

Referents	Normative belief	Motivation to comply	Product
partner	+3	+3	9
employer	+1	+2	2
children	0	0	0
friend	-3	+1	-3
brother	-2	0	-2
		Total	+6

(based on Ajzen & Fishbein, 1980, p.74)

The result here indicates that the intending student believes that she has reasonably positive support from her important referents for starting to study.

While this model depended entirely upon an individual's reflection on the possible outcomes of her behaviour, together with an estimate of what her important referents feel about her study, it might work more effectively for single one-off actions rather than a course of action that may last for some years.

Ajzen and Fishbein refined and developed their model statistically to provide a Theory of Reasoned Action which they claimed could be used to predict behaviour. Becker and Gibson (1998) applied this theory to a study on predicting behavioural intentions for enrolling on distance education courses as a means of accessing continued professional education. They concluded that the Theory of Reasoned Action could not only predict enrolment behaviour but could also identify underlying reasons for students to register, or not register, for courses.

These authors confirm the idea that there are multiple interacting influences on individuals and that these may have an effect on their decision to study. In addition, these studies provide evidence that qualitative research can strengthen validity and that measurable

outcomes can result from a combination of both quantitative and qualitative research.

Therefore, before attempting to formulate hypotheses or design a model which might be tested quantitatively, a qualitative study was carried out using a sample of Open University students. This took the form of semi-structured interviews and was intended to test the conclusions drawn from the literature as well as to search for any new factors.

Design of the qualitative study and the sample population

The design of this qualitative stage of the research was shaped by the literature: to that extent the schedule was partially prescribed by pre-existing data. This led to what Miles and Huberman (1994) describe as a tighter design than that used in purely inductive studies. However, there was still enough flexibility in the questionnaire to allow respondents to talk about the areas that were either perceived to be connected to their responses or to have provided an important addendum to the topics under discussion. In this way it was hoped that the inductive approach would not be entirely abandoned.

The interviewees for this initial stage were drawn from the Northern Ireland Open University students who studied in 1998. While the total population of the Region includes students from the Republic of Ireland as well, it was decided to exclude these students. There are cultural differences between the inhabitants of the two countries, and there are certainly differences in their experiences of interaction with the Open University. These range from much increased fees to considerably less opportunity to attend tutorials, because of the geographical spread of the students.

Historically, students from the Republic of Ireland have had different experiences of higher education than UK students have, in so far as third level education has had to be paid for until comparatively recently. Certainly, at the time when most of the population who are

now aged 30-49 years would have been leaving school, their chances of attending university would, for all but a few scholarship students, have depended upon their parents' income. Additionally, until recently there has been a considerable shortfall of university places throughout the Republic of Ireland for school leavers, despite good entry qualifications. This means that many adults have not had the experience of a family member attending university and this may have resulted in different expectations about learning. Because of these factors, including these students in the research might have caused an unnecessary bias.

The interviews were semi-structured with a template that was flexible enough to allow respondents to enlarge upon areas of their lives that they might have felt to be important. With the permission of the respondents, interviews were recorded. Participants were asked to reflect on aspects of their past and present lives, based upon the findings from the literature review. While the chosen items were selected to reflect the three areas of social and environmental, traumatic and intrinsic factors, it was not possible to relate each to a single area. For example, asking students to talk about their early education was expected to provide information, not only about these experiences and the support they had had in the past, but also about how it had influenced their self-confidence and even their coping skills in later years. So each item was planned to elicit information about more than one factor area. The areas chosen covered: -

- early experience of education
- their memory of their parents' and siblings' attitudes towards education
- any support for third level education from secondary school or family/friends
- early decision making and development of social skills
- early career decisions and their attitude towards employment
- life changes, such as marriage, cohabitation, children etc.
- involvement in leisure/local community/ voluntary work

- other post-school educational experiences
- reasons for joining the Open University, including any changes in life plans and perceived reasons for these changes
- the support they have had/were having while studying from partners, children, parents, wider family, friends
- any changes in their lives as a result of studying with the university
- the support they have received from the Open University
- reasons for dropping out/stopping out (where appropriate)
- hopes/expectations for the future, including goal-setting

Information given in these areas depended upon the respondents' perceived experiences and their selective recall; but it was concluded that the selection of memories that seemed important to the individual would best illustrate the factors affecting each student's learning.

A more difficult task was to identify personal characteristics such as hardiness or coping strategies in respondents. An economical method of achieving this would have been to present respondents with 'case-studies' to discover how they might deal with, for example, stressful situations. However, the disparate nature of Open University students' lives made it difficult to design case studies that would be meaningful to all. A substitute item was designed to ask about any crisis or critical incident that had occurred during the past few years, and how the respondent dealt with this. (A full interview schedule is provided as Appendix 1).

Material collected was analysed using the factors already identified in the literature as well as any other factor or factors developed in more than one interview. Where new factors were identified, they were tested during subsequent interviews with other respondents, though not to the exclusion of the existing schedule. Therefore, the later interviews could have been longer than the earlier. If new factors emerged during the course of the later

interviews, then it would have been necessary to contact respondents for a second time to test new material. If a positive relationship had been built up with respondents, follow-up queries would be managed by telephone. All interviews were carried out by the same interviewer to maximise reliability.

Respondents were asked whether they wanted to have the interview recordings returned to them at the end of the research: none wanted this. All cassettes will therefore be destroyed when they are no longer needed. Interviewees were not identified on cassette, and the researcher was the only person who knew their identity. Data is securely stored on a personal computer and in hard files. Back-up copies on disk are kept securely at the home of the researcher.

Because the research was carried out by an Open University staff member who is also an ex- and current Open University student, the opportunity existed for strong bias in the selection of pertinent data. The interviews were cross-analysed by an academic colleague who, although she has never studied with the Open University, has worked as a Staff Tutor for many years and has a sound knowledge of the system and of adult learning. The final selection and prioritisation of factors was by consensus between the two analysts. It was believed that this cross-analysis would increase the validity of the findings.

The sample - rationale and process of selection

The sample was an example of a 'stratified purposeful sample' (Miles and Huberman, 1994, p. 28). Because theory might be generated as well as tested, a sampling frame was designed to cover three categories of students based upon the different levels of persistence that might be expected. The categories were chosen to try to identify attributes such as persistence or lack of persistence.

Throughout this stage of the research and also the quantitative work undertaken later in the study, persistence was measured in terms of a student who completed one OUUK module with a duration of one academic year. The Open University student database combines students who have left without notification with those who have completed the year but have failed their examination and are offered a re-sit in the following year. Students who complete but fail, may have had more in common with the successful students, at least in terms of persistence, so needed to be removed from the list. This became a manual exercise, as it was necessary to isolate those students who were being offered re-sits and remove these from the lists. This meant, that for the qualitative study, 'success' had to be used as a proxy for 'persistence'.

The first category was that of successful students: those who were awarded a course credit at the end of 1998. The second category was of students who started but who withdrew before the end of June 1998. This category comprised those individuals who withdrew while it was still possible to transfer some of their fee to the following year or have some of the fee returned. These students might well have intended to return to the system in the future and were also sufficiently organised to withdraw before losing all their money. The third category was of students who had left their course in 1998 without notifying the university. Within each of these three categories there were two male and two female respondents, making twelve in all. The literature points to differences between men's and women's experiences of study (Kirkup & von Prümmer 1990), so it was felt that each category should contain both. In designing the sample frame it was also felt that, in addition to gender differences, there might be a difference between first year students and those in second or subsequent years of study. As new students no longer have to study a level one course, this necessitated isolating all those who were in their first year of study, regardless of level of course. For each category, one man and one woman were chosen

who were in their first year of study, and another pair who were in their second or subsequent year of study. Each category, therefore, had four respondents, and in strict sampling terms, all of the respondents were single cases in sub-categories within the three main categories.

Finally, any students who would have known the interviewer were removed from the lists.

Sex	Yr 1 Succ.	Yr 2 Succ.	Yr 1 F/W	Yr 2 F/W	Yr 1 D/O	Yr D/O
M	1	1	1	1	1	1
F	1	1	1	1	1	1

Figure 4.2 - grid of student sample for qualitative study

Succ. = successful student

F/W = formally withdrawn student

D/O = student who withdrew without notifying the university

The lists were obtained from the Open University database (CIRCE) and divided into twelve sub-categories. When the final twelve lists were complete three names were randomly selected from each and numbered 1-3. It was envisaged that, particularly with students who had 'failed', there might be difficulty in persuading individuals to be interviewed and that validity would be improved by using respondents who were selected through the same random trawl. In each case, students were contacted by number, the first name selected being the first to be contacted. The random selection was completed by a manual drawing of numbers. All lists were in alphabetical order.

A major problem with the sampling process was that the lists were often inaccurate. They had been taken from the CIRCE programme by means of standard queries, so should have provided the required information in the separate categories. The conclusion had to be that students had been entered incorrectly in the system, which was somewhat alarming. Fortunately it was possible to find respondents who fitted the categories into which they

had been put. A further problem was that the details of several of the students had been changed or were incorrect. Again, this could have been caused by mistakes in entering student details, but many errors appeared to be changes in telephone numbers, which probably had more to do with the entrepreneurial efforts of cable telephone companies than the Open University administration.

Because the sample was stratified, the respondents interviewed in this stage of the research did not replicate the profile of Open University students as described by Ashby (1996, and Ashby et al.1998). Nor did they fit the typical ages, social classes or educational backgrounds identified by Harrison (1993) or Woodley et al.(1987). This was partly due to the fact that two-thirds of the interviewees were specifically chosen because they had dropped out of courses either formally or otherwise whereas, in the general population of Open University students, the results would have been reversed, with approximately one-third of students dropping out and two-thirds being retained (Peters 1992). Another factor was the relatively young age profile of the students selected: five of the twelve were still in their twenties, three in the thirty to thirty-nine group, two in the group forty to forty-nine, one in the fifty to sixty-four age group and one over sixty-five. This contrasts with the overall age grouping of Open University applicants, where the largest group is in the thirty to thirty-nine age group. Again, because the majority of the students had left courses and because the sample was stratified, it had been skewed from the normal age profile.

The social class of the respondents was also atypical. Looking at the occupations of the respondents themselves, only two were 'professionals', one teacher and one accountant. Four were unemployed, two in security and protection occupations, three who would be described as associate professionals and one self-employed builder who ran his own

business. If the parents of the respondents were considered, they were even less like the 'normal' pattern as outlined by Woodley et al. in 1987. Two of the fathers were farmers, one relatively successful, one less so. Of the remaining ten, three were skilled tradesmen and seven were unskilled workers.

This was a small and focused sample of students, and it was not intended that it should be representative of the whole population or even Northern Ireland regional students.

However, it was still important to note the differences that a stratified sample can make and consider these as part of the analysis.

The next section deals with the conduct of the interviews.

Setting up the interviews

Considerable effort was made to eliminate bias and establish a measure of validity during the interviews. With a total of twelve interviews spread over a period of five months, there was no real expectation of collecting data that would, of itself, prove valid or reliable with a larger sample. What was hoped was that data obtained from respondents would corroborate or challenge some of the findings from the literature and perhaps provide evidence that could be tested later in the final part of the research. The interviews were spread over five months because the time that could be allocated to the research was very limited but also, it was felt that a process of reflection on the individual interviews would be useful. Notes were taken on each interview and each interviewee. These dealt with the environment, the non-verbal communication of the interviewee, the interviewer's reflection on the process and an overall impression of the process (included as Appendix 2).

The selected respondents were first telephoned by the interviewer, and a letter confirming

the interview appointment and assuring them of anonymity followed this up. It was decided to telephone students in the first instance as it was thought to be more difficult for them to refuse a request made by telephone. An initial letter can always be ignored and, if it promises a follow-up phone call, it becomes somewhat threatening and is likely to annoy the recipient. In fact, only two of the possible respondents refused to consider an interview; one because she had never started her course, and the other (who had dropped out without formal notification) who claimed to be too busy. In all categories, it was possible to find an interviewee from the initial trawl although, in three instances, it was the third and last respondent that was used.

With the exception of two, all interviews were carried out in the respondents' homes. One man was interviewed in his parents' home, and another at work; he ran a Youth Centre and it was more convenient for him. Interviewing in respondents' homes, or at least somewhere they felt comfortable and in control of the situation, was considered to be essential, especially as the interviews were to be recorded. One slight difficulty with this procedure was that interviewees tended to sit further away from the interviewer than was convenient for recording. This was overcome by using an external microphone and spending some time in establishing a comfortable and relaxed climate of friendly communication before moving the respondent and setting up the recorder.

None of the interviewees objected to the use of the cassette recorder and, as noted above, none wanted their recorded interview returned to them. With the exception of one respondent, they all seemed to be perfectly happy with the process of recording and the one who was a little uneasy at first, quickly forgot what was happening.

It was a distinct advantage to have the interviews on cassette although, even with the external microphone, it was difficult to transcribe all the material. In addition to the

recording, notes were made by the interviewer about the surroundings and the attitude of the interviewee as suggested by her/his non-verbal communication.

The next section explains the coding of the data and the method of analysis.

Analysis and coding of the data

All data were fully transcribed by the researcher and an assistant. A full copy of one of the transcripts showing the method of analysis is included as Appendix 3. A complete copy of tapes and transcripts was given to the colleague who was to cross-analyse the interviews, together with instructions which were deliberately non-prescriptive in terms of what she might find. She was also given a copy of the literature review so that she would be able to follow the discussion and would have some idea of the factors that were being considered. By doing this, it was hoped that a cross-analysis would be produced that would be dependent on the literature and any inductive reasoning, but would not have been biased by the researcher's approach to the analysis.

The coding for the analysis was devised to be both descriptive and inferential. The descriptive coding was based upon the factors in Figures 3.1, 3.2 and 3.3 (pp. 79-81). The initials of the factors were used for identification, e.g., EE stood for early educational issues and these were noted on the text of the transcript whenever they occurred.

In addition to the presence of factors being noted on the script, inductive comments were made by the researcher on the script. These were intended to indicate possible explanations for particular statements and extend the interpretation of the interviews.

They were also intended to refer to points that might be mentioned by the second analyst.

Any new factors that seemed to be appearing were initially coded with XX for any social and environmental factors, YY for any traumatic factors and ZZ for any intrinsic factors.

These were examined for any patterns that might have appeared across the sample. As each student was a single case within twelve sub-categories, it was not expected that large amounts of new information would emerge and, therefore, there was no expectation of patterns emerging from such small numbers. However, summaries were compiled for each respondent to facilitate comparison. A summary template was devised to provide these results. An example of a completed template is at Appendix 4.

The inferential coding was a simple system of numbers and was intended to mark where there was particular importance attached by the respondent to a factor. This importance could be either positive (1,2 or 3 with three being the most important) or negative (-1, -2 or -3 depending on the amount of emphasis). In this way, it was hoped that it would be possible to attempt to note the level of priority attached by a respondent to a specific factor and thus infer its importance.

The coding frame follows as Figures 4.3 and 4.4

Social and environmental factors	
early educational experience	EE
parental attitudes	PA
curtailment of social life	CSL
conflict with family demands	CF
effect of social group	ESG
juggling roles	JR
social, economic and educational advantages	SEEA
support from other students	SOS
support from friends	SF
support from tutor	ST
support from partner/children	SPC
support from work	SW
Traumatic factors	
changes in any area of life	CL
chronic family concerns	CFC
interaction with institution	II
family crises	FC
financial stress	FS
work stress	WS
additional stressors	AS
problem solving skills	PSS
physical health	PH
individual appraisal of threat	AT
success in study	SS
selection of coping strategies	CS
Intrinsic factors	
motivation and persistence	MP
internal locus of control	ILC
approach to learning	AL
commitment to life activities	CLA
attitude to long-term goals	ALG
attitudes to challenges and change	ACC
self-confidence	SC
optimism	O
organisational ability and time management	OTM
hardiness	H
reflective personality	RP
positive life management and sense of coherence	PLM

Figure 4.3 - Coding for descriptive analysis of qualitative interviews – based on Figures 3.1, 3.2 and 3.3 (pp. 79-81)

1	equivalent to a response that is	(a) weak - barely mentioned (b) not recalled by respondent (c) not thought important by respondent
2	equivalent to a response that is	(a) average - what might be expected to be alluded to in ordinary conversation (b) mentioned by the respondent as part of the context of a more important story
3	equivalent to a response that is	(a) strong - repeated (b) strong - emphasised (c) strong - mentioned by the respondent as important
-1	equivalent to a response that is	(a) slightly negative
-2	equivalent to a response that is	(b) moderately negative
-3	equivalent to a response that is	(c) strongly negative

Figure 4.4 - Inferential coding based on the strength of the response either positively or negatively expressed

To exemplify this; support from a tutor might be not have been seen as specially important, thus scoring (1). Alternatively, support from the tutor might have been viewed as particularly ineffective, actually hindering the respondent's progress, thus scoring (-3).

In the summary template (Appendix 4) numbers were used somewhat differently to indicate the researcher's conclusions about each interviewee. Numbers ranged from (+3) to (-3) and reflected the researcher's perception of the importance of the effect of each factor on persistence based on the results of the analysis. A score of (-3) meant that the factor would have had a strongly negative effect on student persistence and a score of (+3) meant that the factor was thought to have had a strongly positive effect on student persistence. A score of (+) or (-1) indicated a minor effect which may or may not have been important and (+) or (-2) indicated an effect strong enough to contribute to

persistence, though perhaps not sufficient on its own to cause or prevent dropout. A zero score meant that the factor was not applicable, for example, SPC (support of partner or children) would not apply if a respondent had neither partner nor children. Comments were added to remind the author why a particular value had been chosen. An example of a summary template follows as Figure 4.5.

Interview with C		Analysis summary	Traumatic factors
Factor	Inferential coding	Comment	
CL	2	birth of children since he started study	
CFC	-1	wife is epileptic and he has to care for her and children constantly	
II	2	no problems except poor information about his course	
FC	2	possibly minor crisis when wife fits, but not viewed as this	
FS	2	living on benefit - I think is also earning	
WS	0	as far as is known. If study is stress, he was stressed last year	
AS	-2	stress of starting to study and last year's course	
PSS	2	not able to solve all problems - a new type of learning is difficult	
PH	2	a little overweight - sees himself as healthy	
AT	1	doesn't like something he can't cope with - backs away	
SS	2	course last year that he didn't like - bare pass - otherwise distinctions	
CS	2	could drop out - can't cope with study difficulties, but can with family problems	
YY	-2	the course he did last year caused him inordinate stress	

Figure 4.5 Sample summary analysis

As the values attributed to each respondent were based on qualitative judgements, no attempt was made to impose a mathematical framework on the total scores. However, where a Table showed a preponderance of positive or 'plus' scores, it appeared that it acted as an indication of likely completion.

Conclusion

In setting up the study, every effort was made to ensure that the results would be as objective and reliable as possible. There is no doubt that in any interview situation there are subjective elements such as interpersonal interaction, desire on the part of the respondent to give 'respectable' answers and a wish on the part of the interviewer to elicit more information from the subject than is necessary for the research. However, the willing agreement of the students to be interviewed, the cross-analysis of another senior academic and the determination of the author to conduct the interviews as objectively as possible should have helped to mitigate the flaws that exist in qualitative methodology.

The following chapter presents the results and discussion of the qualitative research. It also provides some comparisons with the findings of the literature review where applicable, ending with a summary of the factors identified and the setting up of an initial model based on both the study and the literature.

Chapter 5

Results and Discussion of the qualitative study

Introduction

Although conventionally, in analysis, results and discussion are separated, in this case because of the nature of the qualitative work, it was decided that to divide the material in this way would compromise the reporting of the analysis. Further reference to the qualitative study will appear in Chapter 8 when a discussion of the results of the complete research study will be undertaken.

This chapter describes the process of conducting the interviews and the method used to improve the validity of the research. The analysis and results of the data follows: this section also relates the results to the literature including the models of persistence reviewed in Chapter 2. The chapter concludes with an identification of the factors validated through the qualitative study and the production of a prototype model to be used for initial testing through the quantitative study.

The interview process

The twelve interviews were completed over a five-month period and produced a considerable amount of data to be transcribed. Once transcribed, a copy of the interviews, the literature review and the rationale for the qualitative study were given to an Open University colleague who had more than twenty five years of experience in adult learning and is known and respected throughout the university. She had never been a student with the university. As expected, she produced a thorough and professional cross-analysis of the interviews using the factor diagrams (Figures 3.1, 3.2 and 3.3, pp. 79-81) that had been given to her. Her comments and analysis were in agreement with the analysis from the

researcher presented below. A copy of her written comments appear in Appendix 5.

Dealing with the plethora of information that results from any qualitative research is a difficult and problematic process. It can never be entirely clear when interviewer bias selects specific items for comment instead of other possibly more reliable data. It was reassuring to find that there was agreement between two separate analysts with different intellectual areas of expertise. It was felt that this cross-analysis helped to validate the study's conclusions.

One comment about the conduct of the interviews coincided with remarks made by the interviewer in the reflective account. The initial decision that interviews should be conducted by one person alone was intended to minimise interviewer bias, or at least to demonstrate the same bias with all the respondents. However, both the interviewer and the cross-analyst noted a similar tendency during some of the interviews to offer study advice instead of remaining completely neutral. This may have been a function of the interviewer's occupation; as a Staff Tutor, part of the role is to advise students. It is obviously a part of the role that is difficult to leave behind when interviewing. On careful consideration, there was no interview where it was thought that these interventions created any bias in the data. The alternative, to train and pay interviewers, might have introduced greater bias, would not have been cost-effective and was not viable in the timescale planned for this stage of the research.

The students are identified, for reasons of confidentiality, throughout this discussion by letters of the alphabet. The four students who were successful were A, B, C and D. The students who had formally withdrawn were E, F, G and H and the students who had left without notifying the university were J, K, L and M. Figure 5.1 shows the allocation of identifying letters to each category.

Sex	Yr 1 Succ.	Yr 2 Succ.	Yr 1 F/W	Yr 2 F/W	Yr 1 D/O	Yr D/O
M	A	C	E	G	M	K
F	B	D	F	H	J	L

Figure 5.1- grid of student sample for reference

Succ. = persistent student
F/W = formally withdrawn student
D/O = student who withdrew without notifying the university

During the process of completing the interviews, it became obvious that the sample had not actually worked out as precisely as had been intended. Two of the students who had left courses in 1998 proved to have previously graduated from the Open University. They were G (a male student in the second or subsequent year category who formally withdrew before the end of June) and L (a female student in second or subsequent year category who left without notifying the university). Interestingly, G, although he did not complete, appeared to have more in common with the persistent student group; while L resembled the group that had left without notifying the university. Although these anomalies might have affected the validity of the research, in fact they opened up a further dimension in the analysis and supported the original plan to divide the students who had formally withdrawn from those who had left without notifying the university. It had initially been thought that those who formally withdrew might differ in their home or work situation from those who left without notifying the university but it now seemed possible that students who did not complete were, in some way, different from those who completed. There was now the possibility that there might be two categories of non-completers who were different from each other. It had been thought that those who formally withdrew might differ in characteristics from those who left without notifying the university. This conclusion indicated that the possibility of the existence of three groups, rather than two, would have to be kept in mind during the remainder of the research.

The differences between the reasons given for leaving by the two students, G and L, were quite different and seemed to point to a degree of reflection, particularly on the part of G. G had embarked on a second degree and was in his second year when he stopped studying because he had become involved in a series of visits to the Caribbean where he was using his money and skills to provide homes for impoverished West Indians. These visits were timed for February, March and July, making it physically impossible for him to continue with his courses. His priorities and life plans have now changed focus, as he is semi-retired and has more time to devote to charity. He has achieved his goal of a university degree and, although he still loves studying, his motivation is now to spend some years helping others. This would fit with the theory that: -

" [a person] seeks out the opportunity to behave in ways which will allow him to feel competent and self-determining. He will seek out challenge".
(Deci 1975, p 61)

L, on the other hand, had graduated with a Psychology degree and had begun a Mathematics level 1 course because she had no qualifications in this field and wanted to become a teacher. While success at this level would have been of use to her in her teaching, she found it difficult and just stopped studying rather than withdrawing formally. It is more difficult to work out her reasons for this. She had already gained a degree in Psychology, although without much support from her husband, which had made studying rather difficult. He had previously dropped out of a local university and may have been envious of his wife's success (Asbee & Simpson 1997; Heron 1997). While G had been determined just to prove himself by getting a degree, L had more confused motivation and was unsure why she had done a Psychology degree. She now thought that it had been the wrong choice, although it had gained her exemption from some of the teacher training she subsequently decided she wanted to do. Rather than a determination to pursue a single

goal in her life, she had changed her mind about her future career at least twice; from clinical psychologist to educational psychologist and again to primary school teacher. The differences between these two subjects reinforced the possibility that there might be major differences between three, rather than two, groups of students.

The analysis

The first step in the analysis was to go through all the interviews, underlining any issues that were important either in terms of reflecting the literature or in producing new factors. These were annotated in the margin with the codes for the descriptive analysis as shown in Figure 4.3 (p 102). The 'empty' codes of XX, YY and ZZ were used for any important factors that had not already been identified in the literature. The inferential coding numbers (Figure 4.4, p 103) were added to the descriptive coding in the margins of the transcripts. So, for example, in an excerpt from the interview with C, the following annotations were made (R = interviewer throughout the analyses): -

"Interview with C - second or subsequent year male student who was successful"

R. There's a number of areas that I want to talk about, the first of them is actually your early education, ah, what can you remember about primary and secondary school?

C. Em, in the strictly educational sense?

R. No, any sense, whether you liked it or...?

C. Em, I liked school a lot from start to finish, and at no time did I feel like dropping out of school or anything like that. I actually stayed on for A levels but found that the family pressure - the subjects were - that were chosen for me didn't suit, so I sort of deliberately dropped out at the exam stage after going for the A levels. I just dropped out at that level and didn't feel like going any further at that time. Then about 10 years ago I started the Open University but other than the choices that were foisted on me in secondary school, em, I was more than happy, I was more than happy.

(EE+3 - enthusiastic about school until A-levels)
(PA-3, mother and uncle tried to push him the wrong way - sounds quite bitter about this)
(EE+3)

R. But what was the choice they made? what happened?

C. (Em, basically I had) an uncle who was a pharmacist and none of his sons were qualified and I was the next best choice and I didn't like that. I was particularly good at Maths at

<p><u>school and Physics, Chemistry was - it was OK but it wasn't my first choice, my first preference would have been mostly Maths and Physics and having been led on to do Chemistry and dropped the Physics and the Maths I decided I didn't like that eh, so through having not made my own choice and....</u></p>	<p><i>(CF+3 - early conflict meant that respondent wasn't making his own decisions but labelled by default)"</i></p>
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The identifying letters in this extract are from the coding for the descriptive analysis as in Figure 4.3, p. 102, where EE is 'early educational experience', PA is 'parental attitudes' and CF is 'conflicts with family demands'.

Following this stage, summary templates were completed for all students for each of the factor areas, using the numbers -3 to +3 to indicate the interviewer's perceptions about the interviewees (a completed example is in Appendix 4). Supporting comments were also added to remind the interviewer of her conclusions. The analysis was completed, factor by factor, in the same order as in the literature review and the results are presented in the same way, beginning with Social and Environmental factors. As there was a possibility that there would be differences between students who had formally withdrawn and those who had left without notifying the university, the discussion explores this in the analysis by examining the groups separately, except for the traumatic factors where the groups were all so similar that they were considered together.

While the analysis was being undertaken, gender, previous qualifications and life-stage issues were also kept in mind. The literature had indicated that adult learners, although a heterogeneous group, were likely to include students within a certain age band and with specific levels of previous qualifications (Woodley et al 1987; Tight 1991; Slee 2001). The participation of women seemed to depend upon the subject studied, with traditional occupational divisions noted (Ashby 1998; Tight 1991). A consideration of these issues in this study produced few important results. With such a small sample, this was inevitable.

The youngest student was E who came from an educationally and economically deprived background. He did not tell his family about his studies. Despite his youth, he was taking responsibility for part-time caring for his parents and was determined to return to his studies. (He did, in fact complete the course successfully in 1999). A and J were the next youngest students: one was successful and the other had withdrawn. A came from a higher social class than J, who had a similar background to E, although there was more interest shown in J's education by her mother when she was young. J had a young child and thus more problems with juggling roles, although leaving the course probably had more to do with her inability to manage her life or have any sort of life plan. A realised that having children would add stress to his workload, and wanted to achieve his ambition of a degree before considering a family.

The differences between D and H will be considered later in the analysis: they were at similar life stages but had different priorities. D and F were both unmarried, although unlike D, F intended to stay with a career that she hated while D had taken positive steps to change her career to one that she liked.

Both the oldest students, K and G, had clear life plans and were pursuing these single-mindedly. They both came from relatively deprived backgrounds and had little secondary education. G had always been determined to finish his education and, in addition, had become a wealthy man over the years, while K had made several mistakes in choosing his careers before settling on a life goal outside of the paid work area.

Although the small numbers in this area of the research did not produce any significant conclusions, the literature, both in health psychology (Antonovsky, 1993; Friedman, 1991; Kobasa 1983) and in educational studies (Farnes, 1992) does point to an effect which is due either to the stage of life or the possession of a sense of coherence. The evidence for

this is strong. The suggestion of a 'life-stage' and a developed 'sense of coherence' implies that any model produced will not be static but dynamic and subject to change. While it is useful to accept that students will change over time, gaining confidence as well as skills and thus probably increasing their chances of persistence, the focus of this research is on the mix of factors that affect students at any stage where staying on may become difficult.

Social and environmental factors

All the persistent group, A, B, C and D, had enjoyed their schooldays and scored 2 or 3 on this item.

" I chose to go to another school, approximately 20 miles away, which was a very, very good school...I was very happy at that school and I'm always glad I made that choice to go to that school at 11"
(interview with D who completed)

Parental attitudes seemed to have more to do with social class and were not found to affect the Open University career of the students, although they had affected their earlier education. No specific social class rating was made but there were interview items about the jobs and education of parents and siblings and these provided some indication of the social class of the family. Of the 'successful' group only B would have been described as 'middle class'. There was also little evidence of curtailment of social life as a result of studying, nor of the effect of the student's social group, except where the social group had provided support.

Conflict with family demands and juggling roles affected the two respondents in this group who were married with children (B and C). Interestingly, gender differences did not apply here. C was a Carer with a disabled wife and his juggling of roles was very similar to B's experiences.

"..Now when he (husband) comes home in the evening, I would then, I would get my son from the school in Belfast and then I would head down home, but (husband) keeps the two kids in school and they get some of their homework done...Monday night I'm out at my course so he would take her on Monday afternoon, Tuesday, Wednesday Thursday and Friday we would have a takeout, you know..."
(interview with B who completed)

"...there weren't that many constraints - summer holidays were a bit of a problem now - more in recent years because I had the children in the house and it was more difficult to find the time...I could go out for the day to a local park - everyone else would run around and play and I would sit and read my book."
(interview with C who completed)

The literature has tended to concentrate on the problems of women with children (Blaxter & Tight 1994, Morgan 1991, Clouder 1997). The only research into male study problems was from Lunneborg (1997) and she did not find any caring-related problems.

A and D were unmarried, though A lived with his partner and it was his duty to look after the house and do the cooking, with which he sometimes got behind because of his study. D had been divorced and lived alone. A and D were younger than the other two respondents in this group.

Social, economic and educational advantages appeared to have little effect on the group's subsequent study experiences although again their earlier education had been affected when parents had not always encouraged them to go on to higher or further education.

Support was seen to be essential, with mothers who had not particularly encouraged their children at school now supporting them wholeheartedly. All the members of this group were encouraged by their partners/spouses, and A, C and D by their mothers (B's mother and father had died before she started to study again). With the exception of the disabled spouse, the other partners are lifelong learners themselves, as was B's sister-in-law who was also a supporter. The literature indicated that support was seminal and that the kind of support provided was important (Clouder 1997, Kember 1995) but the results here did not differentiate between varieties of support - all were useful to the students.

Extra factors that became apparent in this area were the ability of the successful group to

work on their own, without tutorials. They were ambivalent about tutorials, although A, C and D attended if possible, it seemed as if this was an insurance rather than a necessity. D's job made it difficult for her to attend tutorials but she had a 'buddy' who could be counted on to take notes and offer her support. The mothers of A, C and D worked part-time when their children were at school but this seemed to be a function of social class or necessity, as the work described was low-paid and unskilled or semi-skilled. B's parents, who were middle class farming folk, did not expect a wife to work outside the home, which may have added to B's stress about neglecting her children (Castles 1985).

The second group, the students who had formally withdrawn, E, F, G and H, were somewhat more negative about their school experiences. E was emphatic about hating school: he actually literally hated the school, and not the learning. He admitted that as soon as he left, he realised that he wanted to go back to learning. Also in this group was F, who failed the 11+, which had a disproportionate effect on her school career: she remembered little else about school.

"...I remember being told I'd failed it and that was just - my whole life was over - that was it - I wasn't going to university, I wasn't - that was it, because I'd always been told 'you're going and that's it and suddenly you know I wasn't going because I'd failed...' " (extract from interview with 'F')

In fact, she went on to A-levels and a degree and qualification in accounting but still seemed to be haunted by early failure. G enjoyed school, though this was largely to do with the range of sports at the school: he would not have contemplated staying on past 14. This was more class related, as he admitted; he left school because it was necessary to add to the family income. This factor was endorsed by Lunneborg (1997) who identified early school leaving as something young males felt they should do. H was happy at primary school but less so at the large secondary school she attended: she tended to be a loner. It should be remembered that G was the student who graduated with an Open University

degree and dropped out of his *second* degree studies. E was the only member of this group who suffered from juggling roles and conflict with family demands; that was because he became a part-time carer for his father and mother, which led to his dropping out of his foundation course. He was an 'invisible' student; he had told nobody about his studies except his mother, because he was afraid of ridicule. Again, in this group, neither the effect of the social group nor social, economic or educational advantages seemed to have affected the interviewees; either as children or as adults.

Of this group, G (the graduate) was the only member who had been supported by anyone, and he had been strongly supported by his wife and other Open University students.

Every member of this group except G worked in an isolated fashion, rarely attending tutorials and not really using their tutors. G attended tutorials as regularly as possible, and made use of his tutors to ensure he was on the right path, which could have been a result of his experiences of study during his first degree.

Of the third group, those who had disappeared without notifying the university, early educational experiences varied from not liking school at all (K) to loving school (M). The latter, however, freely admitted that he liked the social aspects of school rather too much to concentrate on the learning. Parental attitudes again seemed to have more to do with social class and expectations of education than anything else. M's father was very supportive and was, in fact, a returner to education himself. Despite this, both sons in this family have dropped out of university. L (the other graduate) had little support from her parents in her early education and none from her husband when she was doing her first degree. Her mother-in-law had provided some respite for her by looking after the children, of whom there were eight, some of whom were very young when she was studying.

There was no real curtailment of social life for any of these respondents. L had previously managed to do her first degree, bring up 8 children, start a voluntary group, work with the Church and undertake outdoor pursuits as well. J had little social life, as she had a young daughter and was a single parent. However, she did note that when her friend came home from America, her social life improved and she got further behind with her Open University course!

There was conflict with family demands and juggling of roles. This particularly affected the two women, both of whom had children. L worried about the effect her study was having on her family and J was unable to get to tutorials. M found that he did not want to get down to studying after work, but his wife forced him into starting each evening. K was totally unaffected by any demands on his time: he compartmentalised his life to give time to his wife, son, and leisure interests. He said 'she prefers me to be out of the kitchen...!'

Social, economic and educational advantages were similar to the other two groups and appeared to have had little effect. In fact M, who had most support educationally, had previously dropped out of higher education twice.

Neither J nor K were really supported by anyone, although J did say that she had a friend who was studying at the Open University. This friend, however, was doing much better than J and, although she was encouraging, perhaps was seen as more of a threat to J's progress.

"...I was getting annoyed at myself because I was putting the hours in but when it came to writing the assignment, I couldn't do it. I was getting angrier and angrier and angrier and my grades weren't going up any more and I wasn't getting over the 55 mark and a friend of mine who actually her little boy is in my Kirsty's class as well so we're meeting each other every day and we were going to school together, she had a car, plus she had two kids and a husband, but she was getting near 100 in every essay, and I kept saying 'how's she doing that'..."

(interview with J, who left without notifying the university)

M was strongly supported by his wife and L was helped by her mother-in-law and some friends which may have had a positive effect on her studies. While even supported students may drop out, evidence from the interviews does suggest that they perceive support to be important to them.

"..I suppose, one of the main factors I remember is because my Dad and Mum took such an influence, or had such an influence and were very supportive and things like that, and wanted me to do well and sitting down to do the homework, things like that made me enjoy doing the work then..."
(interview with M who left without notifying the university)

J, K and M were isolated in their study, M because tutorials were too far away, J because she could not get baby-sitters to allow her to attend tutorials and K because he had progressed to fourth level where his course had such small numbers that it was not viable to appoint an Associate Lecturer in Ireland, so his tutor was in England.

The 'XX' category covering any new factors in this area produced no new significant data. Several students had mothers who worked part-time, apparently for reasons of financial necessity but there was no evidence that this had affected study patterns in their children.

Summary of social and environmental factors

Summarising the social and environmental factors for all groups, it appeared that early educational experience can sometimes have a dramatic effect on individuals. This is supported by the literature (Woodley 1993, Lunneborg 1994, Heron 1997 and Grace 1993) so should be seen as a factor in persistence. However, it seemed to be heavily intermeshed with parental attitudes and social, economic and educational advantages, and it was difficult to separate these effects.

The conflict with family demands and juggling roles appeared together in all the interviews, so could be subsumed into one factor. Although the women with families did,

in fact, have to juggle their roles as perceived in the literature (Blaxter & Tight 1994, Morgan 1991, Grace 1994, Castles 1985) so did C, the male carer and, to an extent, A who had responsibilities for housework. There was more opportunity for B to use her supportive husband and her children but she seemed to be unwilling to do this. Perhaps it is the role and responsibility that is important rather than the gender. However in the majority of nuclear homes headed by a heterosexual couple, it is still the woman who takes responsibility for the home and family (Muncie et al., 1997; Cornwell, 1984) so presumably it will continue to be women who are more likely to have to juggle roles when studying.

The most significant factor seemed to be that of support for the student. Although many of the interviewees had not been particularly supported in their earlier education, parents were now supportive of the Open University study; often mothers; but with some fathers showing interest as well. There was still no real evidence that the identity of the supporter(s) was of importance but all of the persistent respondents had considerable support. Members of both the groups who had failed to finish their courses lacked support, except for the two graduates who had dropped out the second time around. These two had been supported during their successful study, while the only unsuccessful student to be supported was M. He was supported by his wife and determined to support his own son in his education. The fact that he had previously dropped out of higher education twice seemed to point to a deeper problem than merely an inability to cope with the Open University. In the interview, he bemoaned the lack of a peer group and tutorial support, so perhaps he needs the constant support of other students and tutors or, perhaps, he had not yet developed a positive life plan or sense of coherence (Antonovsky 1993)

The data indicated that the type of support given did not seem to be any more important

than the identity of the supporter(s). Although two of the women, B and L, could have made more use of practical support, they did not really ask for this. They were both in their mid-forties and the age factor may have been more important than gender differences. In Northern Ireland, gender stereotyping is still common, especially for women over 35 (Trewsdale et al 1999). In addition, these two women were from rural and lower middle class backgrounds where families might be expected to be more traditional in role divisions.

It was most important for the students to perceive that they were supported and it seemed, from the interviews, that emotional support was what they needed. As long as they had someone who was interested in what they were doing and who approved of their study, they were encouraged to continue.

Data emerging from the analysis of the three groups indicated that the most important social and environmental factors were: -

- solid support for the student by any other individual or group
- conflict with family demands and juggling roles

The data also suggested that a factor that could under some circumstances be important was: -

- early educational experiences - perhaps mediated by parental attitudes

Of these three, the seminal factor was perceived support. Together with the evidence from the literature review (Ajzen and Fishbein 1980), the results from the qualitative interviews clearly indicated that support would increase the likelihood of student persistence, and that perceived encouragement from any source was enough to affect adult learners positively.

It was also possible to conclude that lack of perceived support might act as a deterrent to

the majority of students and would be one of the more important factors that could lead to a lack of persistence.

Traumatic factors

As noted in the summary of Section 3.2, Chapter 3, p.57, the factors in this area are often dependent upon intrinsic factors peculiar to the individual student, so that they are difficult to analyse in isolation. It should be noted that the factors that might have caused stress were, in the main, less important than the way in which they were dealt with by the students. So, for example, D had been divorced, changed her career, had met a new partner and coped well with all these changes. H had also been divorced, re-married and changed careers but still lacked the confidence that D had gained. However, H wanted children and had had a number of miscarriages. Lacking in confidence initially, her apparent 'failure' to produce a baby may have made it difficult for her to feel successful in any area of her life.

In all of the groups, some respondents had experienced important life changes; divorce, the advent of children, career changes and bereavement. There was no indication that these changes had affected the persistence of the respondents. There was, however, an indication that the coping strategies they had used might have had an effect on their persistence. The data produced by the groups were so similar in each of the first ten factors listed in the analysis coding (Figure 4.3, p.102) that all three groups could be dealt with together.

Chronic family concerns affected C, E and J; one from each group. These concerns were practical; E and C coping with family illness and J coping with being a single parent and childcare. The illness of E's father and the dependence of his mother were directly responsible for his withdrawing from his course, although it is possible that a more

confident and mature personality might have investigated his options more carefully: he was unable to go to summer school, but this could have been dealt with without withdrawal. C was able to deal with his wife's chronic disability and coped well, though he found looking after his daughters sometimes irksome, especially in the summer holidays, which probably applies to many individuals who care for children while studying. Overall, chronic concerns were less likely to affect student progress than might have been supposed. Lazarus and Folkman (1984) conclude that adaptation to chronic stress is necessary for health. Of these three students, C (a persistent student) seemed to have adapted well to caring for his wife, bringing up his daughters and studying. Yet, of the three, his was probably the most stressful role.

Family crises were, as expected, factors that had a major effect on persistence. For all groups, this applied particularly to illness, either of the student or a close family member. Thus, E dropped out because of his father's illness, H because of several miscarriages, K because of his own serious illness and L (during her first degree study) because of her new baby's illness. M also claimed to have dropped out because of the death of his mother. None of the persistent students admitted to any acute crises so it was difficult to draw conclusions about their coping ability.

When discussing the likelihood of acute crises affecting persistence, it is important to remember that original anecdotal evidence mentioned in the introduction to this research found that students often endured appalling crises and remained with the university. One tutor had dealt with a mother whose children had inherited a gene that predisposed them to a rare type of cancer. Two children had already died when she started to study with the tutor. A third died while she was doing the course, yet she continued to the end. So it is not enough to suppose that a crisis will automatically result in withdrawal: it would appear

that a family crisis may be mediated by other, possibly intrinsic, factors. It might be possible that a student would feel that continuing to study provided the only stable link with normality in the face of crisis. There is anecdotal evidence for this from tutors and students, but it is not a topic that has been seriously researched. What might be possible is that a student would plan at the start of a course or module not to withdraw if crises arose. This could describe the reflective individual who was determined to carry out a life plan, however tenuous this might be. It would also suggest that the student viewed problems as challenges to be overcome rather than obstacles which would result in dropping out of a study programme.

A further source of stress might have been caused by interaction with the educational institution. Interaction with the Open University comes in three ways; working with the tutor and the materials, contacting the regional/central services and approaching the central services at Milton Keynes. The central services at Walton Hall are responsible for the production and mailing of materials. They send central Course Choice mailings to continuing students for second or subsequent years of study. They liaise with the regional services on fees collection and examinations. The regional services provide study support, accept reservations and registrations, take fees, correspond with students about their tutors and tutorial timetables and deal with students with special needs. Additionally each faculty or school maintains at least one academic staff tutor who is responsible for appointing tutors, mentoring and developing tutors and mediating between tutor and student when this is necessary. It is easy for students to become confused about who is responsible for what and most will contact their regional office when in trouble.

The persistent students were less likely to contact regional/central services, or at least less likely to have commented on the experience. They treated their tutors as a resource, to be

drawn on if necessary, but did not expect to be dependent on a tutor. The group who had withdrawn seemed to have had little trouble with their regional/central contacts either, but a perspective from the inside indicates that E was not properly counselled when he withdrew, as he could have been excused from his summer school. They were somewhat noncommittal about their tutors, although they all stayed with the university until May or June, so must have had contact even if only at correspondence level. Perhaps they felt that tutors should have been more pro-active in offering them support - it had not occurred to any of them to seek advice from their tutor on withdrawing: although the tutor was the person who knew their work best.

Perhaps not surprisingly all the members of the group who had left without notifying the university were slightly more negative about interaction with the institution, although J differentiated between the institution, which she saw as giving her the wrong information, and her tutor, whom she thought was wonderful. It is debatable whether this apparently negative result truly reflects the overall perception of the university. There is plenty of research to show that students value their tutors and tutorials highly (Field 1993, Jelfs 1998, Thorpe et al. 1986).

One of the dangers of analysing conversational interviews is that students who are conscious of failure may tend to try to represent themselves in a 'good' light by casting doubt on various aspects of the provision. This is often an accusation levelled at survey data but it might be equally true of qualitative situations, where the researcher works hard to establish a positive social relationship. During the process of interviewing, it was interesting to note how quickly respondents became willing to reveal themselves to the interviewer, often coming to conclusions that they might previously not even have considered. Growth of such temporary intimacy might also have led to the respondent

valuing the interviewer's opinion too highly. Research in the social sciences into bias in interviewing has indicated that respondents may give the 'respectable' reply, over- or under-estimating the importance of factors according to their reading of the expectations of the interviewer (Moser & Kalton, 1981).

There was little financial stress, except for A who would have liked to progress faster but could not afford to pay for the 60 point courses he really wanted. As both he and his partner were earning good salaries, this may have reflected his priorities, which were not all concerned with his studies. The most economically deprived of the students, J and E, were receiving financial assistance, thus not paying their own course fees. Work stress had affected M, who had left without notifying the university, although his employers had paid his fees and allowed him to be flexible in his work to fit in his study. D, the policewoman, who might well have been extremely stressed by her work in the plainclothes branch of the force, did not mention work stress at any stage but, nevertheless, there were occasions when she knew she would not have time to study. She did mention time constraints, but they were seen as challenges to be managed, rather than stressful situations. Again, it seemed to be the way in which this type of stress was managed that was important.

Additional stressors mentioned applied to all the categories of student. Some were haunted by the fear of failure; for example C and D. Others were affected by guilt about neglecting their families; this applied to B, J and L. Yet others had priorities beyond the Open University; H who wanted a baby, G who wanted to continue with his charitable work and K who had an overriding research interest. These stressors did not seem to affect persistence, provided the individuals were confident and hardy. This finding related to the data from health psychology quoted in the literature review earlier (Kobasa 1979;

A perception of the possibility of poor physical health was not a problem for most of the interviewees. Only K's sudden and severe illness caused him to drop out of one year's study, but he claimed to be quite recovered and none of the others described any problems with their own health. It could be argued that H's unfortunate string of miscarriages have left her in a somewhat depressed and under-confident state: they certainly could not have helped to improve her self-esteem.

A consideration of the importance of success in study showed that, as expected, once students had been successful in one course, they tended to gain confidence. This corroborates Northedge's assertion that the first year of study is a "culture shock" (quoted in Grace 1994, p. 24). However, this confidence could be dented quite easily if their grades fell: D was devastated by getting 49% for an assignment, and C was so shaken by a course with a different learning style to that to which he was accustomed, that he almost dropped out. Only the pressure from his wife, mother and sister-in-law kept him going.

So though, in general terms, the data indicates that success breeds success, it is likely that newly found self-confidence can be knocked back easily and that past experiences can multiply the effect of poor grades, even with a student who has led a successful study and career life since schooldays. Perhaps the generally held opinion that once students have survived their first year of study they will be sufficiently confident to continue does not hold true in all cases. The growth of confidence is, of course, an individual characteristic and is further dealt with under the section on intrinsic factors.

Problem-solving skills and individual appraisal of threat were inextricably linked. Those, like D, who saw problems as challenges to be overcome, were able to solve their problems

by sheer application and tenacity; and those who saw problems as threats, as did F, tended to turn away from them and solve them by ignoring or withdrawing from them. These conclusions again reflected coping strategies and the level of self-confidence.

The coping strategies also varied depending on the situation. L, who coped with a Psychology degree, a family of eight children (some of whom were born during her studies) and a husband who gave her little support, was unable to cope with a foundation level mathematics course. C, who cared for his wife and two daughters and had been extremely successful in his studies, was unable to cope with a different style of learning and would have dropped out had it not been for the combined efforts of his wife, mother and sister-in-law. This variation in coping strategies was noted by Carver and Scheier (1994) who thought that an individual who had adopted a rigid coping style might not have the flexibility to manage other types of stress.

The most successful coping strategy used by respondents seemed to be; appraising study problems as challenges to be tackled, deciding whether anyone could help them, asking for help if necessary and otherwise solving their own problems (A, B, C, D, G, K and L). For example, D knew that she would be unable to attend tutorials, so formed a learning partnership with another student. This student took notes at tutorials and met with her to discuss the notes and the course in general. K, on the other hand, met the challenge of having no tutorials to attend by compartmentalising his life and adopting a deep method of study (Entwistle 1996) which involved him in extra reading to ensure that he did well in his courses. All of this group had completed courses at some stage in the Open University (G and L being graduates).

The selection of coping strategies seemed to be the most important factor for all the groups. It was also the one where the results depended upon the inferential coding of the

interviewer, so needed to be regarded with caution. Some students could not remember any critical incident that had affected them, and those who did were ambivalent about how they had coped with any such incident and sometimes had to be led by the interviewer putting direct questions about coping style. The research, therefore, had to consider the entire range of responses inductively for indications of coping mechanisms. Despite these interventions, the findings were corroborated by the second analyst.

It was not unexpected to find that coping strategies were seminal. The literature had already demonstrated this quite clearly and identified the most efficient coping strategies as being either problem-solving by the individual or, when it would be useful, asking for help (Lazarus and Folkman 1984, Amirkhan 1990, Výrost 1997, Lovaš et al. 1997).

The only new factor that emerged from the analysis was that students seemed sometimes to be unaware of stress which related either to difficulties caused by family responsibilities or to general concerns with any aspect of their lives. While B was able to articulate the juggling of roles, she did not mention how much strain her children caused her, although she coped with this by prioritising their demands and leaving her study immediately if their needs intruded. F was surely unusual in both having a job *and* leisure interests that she hated, but these must have caused her considerable stress: -

"... I hate my job, I actually hate it. But I don't think I – I don't think I would like – I see it as – my theory is that I'm not born to work you know I don't think I'd be happy doing any job to be perfectly honest - you know I just would moan about it no matter what job I had to do because I'm not really doing it out of choice you know in that – I probably could find a job that I really really liked but it wouldn't give me the money that I need to live on – but I wouldn't even know what that job would be - do you know what I mean?"

"I mean whenever I'm not working either em or going to them horrible, horrible, horrible aerobics classes that I really really don't like two or three times a week or I'm like round my friend's house or whatever and doing things with them you know so I just potter about. ...But I - I don't go because I enjoy them and I don't understand people who say they get a high or a buzz from exercise - I just don't understand that...." (excerpts from interview with F who formally withdrew)

This may be the chronic stress referred to by Lazarus and Folkman (1984) as 'daily hassle'

and, while not important in normal circumstances, may produce an additive effect so that a student who is not succeeding may be affected by this extra stress to the extent of leaving the course. This factor, however, was not sufficiently often present to be considered as more important than more acute forms of stress.

Summary of traumatic factors

Analysis of the data indicates that the most important factor arising from the analysis of this group would seem to be: -

- Coping strategies

Less important factors which might affect students with poorly developed coping strategies were: -

- Family/personal crises
- The possibility of physical ill-health
- On-going stress
- Poor interaction with the institution
- Lack of success in study
- Other new stresses, which might be, for example, financial or work-related

Although these have been identified as less important, it might be postulated that they are 'additionality' factors, that is, factors that, if they appear in multiples in the student's life, may affect persistence. For example, a student who has a family or personal crisis, then gets a low grade for an assignment and has employment stress as well, may rationally conclude that s/he does not need the extra stress that university study produces.

The next part of the analysis deals with the intrinsic factors though it is already obvious that, as suggested earlier, there will be considerable overlap with this section. From the literature, as well as the pilot interviews, it appears, for example, that coping strategies cannot easily be separated from intrinsic factors such as determination, motivation and a

sense of purpose.

Intrinsic factors

Although the sample was not large, and the study was exploratory in nature, this section yielded a great deal of information. Because of the extensive volume of literature reviewed, it was expected that the area of intrinsic factors would provide the greatest amount of evidence to corroborate or refine the literature findings. With such a small and unrepresentative sample (idem p.109) the results might have been entirely random rather than providing a test of the literature. In the event, analysis of the interviews produced evidence to support most of the factors that had proved important in the literature.

There were important differences between the three groups; those who had persisted, those who had formally withdrawn and those who had withdrawn without notifying the university; so this section discusses each separately, beginning with the group who had completed.

For the persistent group, motivation was less to succeed in their course than to achieve long-term goals, and these, in turn, affected the approach to learning. So, for example, A wanted a degree to help in his career and persisted with his statistics course (chosen because of cost) by adopting a surface approach to his learning. In his second year, where he chose a biology course which he found much more interesting, he had to abandon his deep approach part-way through the course and change to a more strategic approach to find the time to complete the assignments and keep up with the timetable.

[in response to a question about studying causing stress] "Yeah, it would do, especially if I'm interested in something, last year's didn't because I didn't care, it was just like another sum, didn't really care if I understood it, it was a "monkey see, monkey do" attitude, I don't like the subject, I need to get it to get 30 points, that's it. This year, with enjoying it and actually getting into it, I'm digging myself into a hole, going and getting large textbooks, getting people at work and all, going to the doctors and saying 'I can't understand how you do all this - would somebody explain them to me' and I'm probably going far too deep, you know, I think everything I need to know is in the book, which I found statistics was passively laid out and you couldn't have done anything else, I

think I'm digging myself into a hole because I like it which has caused me my own... I'll cause myself a bit of stress, I'm my own worst enemy..."

"(Now) I've cut back, I've stopping digging myself in, once we got through the, em, I got through most of the Human Biology part of it, and the cellular, which is where I was really getting involved in it because I can really very, very....em, I've done as much as I need to do, I was doing maybe 15 hours a week for two or three weeks and it's a 7 hour week course you know, I was just, but once I got it into my head - that's me now, I just sort of sit back and, and I've just been a bit more objective, I just sit down in the morning and think that's boring and that's interesting and I'll just read that bit you know."
(interview with A)

B and D, who had long-term 'insurance policy' aims of perhaps changing careers sometime in the future, chose subjects they would enjoy and adopted a strategic approach. To quote

D: -

"to be perfectly honest I spoke to someone who was a few years ahead of me...he gave me advice... 'you can do half of the course very well, or you can do the full course half well and you can still pass the exam and get a good mark'".
(interview with D)

C started to study because he needed to grow and progress and because he loved learning and wanted to know more about computers and information technology. He was close to graduation when interviewed and used a deep approach to study until 1998, when he took a course with a completely different style of learning which almost destroyed his motivation. Persuaded by his supporters, he adopted a strategic approach and completed successfully.

"I went on holiday last year and never opened a book from the 18 June until about the second week in September when I decided - well - I've studied 50% of the material, and if I study - if I go back over it and revise it, there's a possibility of getting 40% that I require for a pass - as I say, that's what I did, despite my view of the material I'd done over the first few months, I ended up by managing to get a grade 4 pass without doing any more than that....when it came to June and - it wasn't exactly a conscious decision to stop but...I was already starting to resent it a little at that stage and I was staying with it purely from the point of view of my wife, my mother and my sister-in-law who kept saying that it was very silly to quit."
(interview with C)

As B and D progressed through their courses, the idea of a degree became more accessible and more important to them. Success in study seems to have increased motivation for both of these, as it had for G and L. All of those who had succeeded had goals that were more than successful completion of their study, although the study was part of their overall plan. This matches research undertaken with Open University and other adult students; Bird and

Hailes (1996) found students changing courses, leaving the university for other vocational programmes and dropping out because of changing jobs or promotion. Kerka (1995) also suggested that adult students would begin to study and then might withdraw for personal or work-related reasons. They would be likely to return in the future if they saw study as helping them to achieve their goals in either their careers or personal lives. Deci (1975) concluded that individuals would work or strive only until they had achieved their goals and this thesis described the members of the successful group of students.

The tendency of the persistent group then, was to work at the strategic level and aim for success. All could be described by Entwistle's definition of strategic learning: -

"Intention – to achieve the highest possible grades by putting consistent effort into studying, finding the right materials and conditions for studying, managing time and effort effectively; being alert to assessment requirements and criteria; gearing work to the perceived preferences of lecturers".
(Entwistle, 1996, p.101, Table 10.1)

The commitment to life activities and attitude to long-term goals was clearly demonstrated by the successful group. While A, B and D were working towards a plan that would allow them to change career or progress in their career; C who, as a Carer with perhaps another fifty years of caring in front of him, could not allow himself to think of regular employment, still had planned to keep studying for a second degree and then a higher degree. He, too, had a life plan which kept him working and learning.

The self-confidence and optimism in this group was strong. They all saw themselves as being in control of their lives, even when this was not obvious to an objective observer. Scheier and Carver (1992) found that optimists perceived their goals as attainable, which in turn increased their confidence and feelings of control. They were all capable of managing their time well, even though they had full lives and other roles. They all showed signs of reflecting on their life chances and their past mistakes, which they viewed

in a reasonably sanguine manner. For example, there was a notable contrast between their memories of early education problems and the memory of F, who had withdrawn from her first course and had been dealt a considerable psychological blow by failing the 11+ examination, even though her subsequent experiences of education were all positive.

All the persistent students could have been described as hardy and able to manage their lives positively. They fitted Kobasa's (1979) definition of hardiness, believing that they were in control of their lives, strongly committed to life activities and seeing change as a challenge which they could tackle if necessary. They also fitted Friedman's (1991) definition of a 'healthy' personality and appeared to possess Antonovsky's (1993) 'sense of coherence'. They were unlike the other two groups in these ways.

The major difference between the second group, who had formally withdrawn, and the group who completed, appeared to be about being or feeling in control of their lives. E hoped to return to study as soon as possible: he was elated by learning. He had a dream of a degree and career as a scientist, but first, he needed to study. His life plan was not yet developed and his focus was entirely on study. F was probably motivated by needing to know that she could still study: failing the 11+ still rankled with her. However, she had assumed that she could tackle a third-level course, and a mixture of the amount and depth of the work, together with efforts to use a new method of studying, defeated her. H, who arguably loved learning most of all, was progressing through her degree studies slowly. Her experiences as a protected youngest child, an unhappy marriage and divorce and her apparent difficulties with conception have made her less than confident. Her motivation was high and she is persistent but she had other priorities which have slowed her down. However, her love of learning has brought her back to her studies: her approach was deep, as she wanted to know all there was to know about a topic.

"...I love the papers so, I love, (*husband's name*) will laugh at me if we go away anywhere, I'm the one who comes back with a leaflet, I just, I have this thing about em, [laughs] it's every leaflet I can get my hands on you know and I have to go through, if we're staying somewhere I have to find out what's on in that place at that particular time we're staying in case we miss something, you know, and it can be very infuriating but I have to do it and I have to totally try to learn as much about the place I'm staying in as I can whatever it is." (interview with H who formally withdrew)

These three lacked the aspects of hardiness and sense of coherence that the persistent group exhibited - they were neither optimistic nor particularly confident and had no sense of positive life management. Bearing in mind that a sense of coherence has to be developed over time, this does not mean that they would 'fail'. E returned to study and has done well but he had not yet reached a stage at interview where he knew why he was studying. He lacked any sort of support but that was his own choice, as he told nobody except his mother about his study and she did not understand him. F was unlikely to return: the blow to her self-esteem was great and would remind her of her early failure at school. H was distracted by her longing for a child: her priority in life was not to finish her degree. E and F had memories of early failure and, as Lunneborg (1994) claimed, these memories of thwarted expectations, early humiliation and loss of self-esteem affect adults deeply. H had never been given an opportunity to manage her life: she fitted the individual with an external locus of control identified by Lefcourt (1976) who learned to be helpless by never having needed to make decisions.

The group that had formally withdrawn was less confident than the persistent group; E and H working more in hope than in optimism.

"Yeah, I find it doesn't take a lot to put me off, I suffered a few miscarriages here and there and I just thought 'I can't do this' and then I phoned the tutor and he wasn't sympathetic.. he sort of made me realise 'well it's up to you'... OK,. I've let myself down for two years, but it's not going to happen again, and even I don't have the confidence that I'll finish, I just want to and hope that I will" (interview with H who formally withdrew)

E was sure he could cope with the courses but was worried about his family and workmates laughing at him. H just 'hoped' she would get to the end of the course, despite

having been successful in previous modules; and F was very lacking in confidence at many different levels. Neither E, F nor H had really attempted to reflect on their experiences as learners and none tried to analyse their experiences. They wanted to adopt a deep approach to their learning but knew that this would take a lot of time and they were unsure how to begin.

G, who had previously graduated, fitted the profile of the persistent group rather than that of a student who had withdrawn. Hardy, in control of his life, with a life plan that was flexible but coherent enough to give him the satisfaction he wanted, G had good reasons to decide that one degree was enough and there were other priorities for his life. As a man of retirement age, his decision to devote his energies to charitable efforts was in line with his previous proficient life management. He had his degree and felt he had nothing left to prove in the intellectual arena.

The third group, who had disappeared without formal notification to the university, showed a more fragmented approach to studying, except for L, who had previously graduated. M wanted to learn, to be qualified as a social worker, to be good at his job, but he did not really want to study and had to be bullied by his wife to open the books in the evening.

"(wife's name), my wife would have - was very supportive - em - of studies and things like that, and if anything would encourage me to do - she'd be the one who'd keep me going - drag me up and turn the TV off and say 'Get up there' she would be very supportive that way so she wouldn't see obstacles and all!"

(interview with M who withdrew without notifying the university)

J wanted to train to be able to do a well-paid job but was not able to cope with isolated learning. A mother at twenty, she lacked the development and sense of coherence to plan

realistically. She needed to be in a learning group where she had some social contact as well as having her confidence boosted and she was without support, which she really needed. She made the common error of assuming that the Open University was an easy option and adopted a surface approach to the learning which netted her low pass grades. Her motivation finally disappeared when her friend returned home from America and she could start having a social life again. In her interview, she seemed to find it impossible to find sitters for her daughter for tutorials, but this was apparently easier when she was going on holiday or out to the theatre. J and M had little ability to manage their lives and were uncertain of their long-term goals. They were both young and fitted Antonovsky's (1993) theory that a sense of coherence has to be developed through the experiences of childhood and young adulthood.

K was absorbed by learning and his studies were intended to teach him more about history, with an emphasis on earlier periods, so that he could pursue his obsession with a French village and the medieval happenings there. His approach was deep and he would undoubtedly finish his degree. A large part of his interest in life, perhaps his only interest, depended upon learning and research. The goal was not to have a degree but to publish his research. This will have ensured that he would return to his study. He was a loner, who seemed to have put himself deliberately in this position. Having had illness and some false starts in his career, he had little sense of positively managing life. He did, however, have a strong desire to achieve both his study and research goals, which he might have considered to be his shield against greater involvement with real life.

L, the graduate from this group, resembled the members of the group who had completed in her approach to learning and her persistence, despite having had little support from her partner and having brought up eight children while studying. Her goal was set; she

wanted to teach and she would achieve this. She must be viewed as hardy and able to manage her life positively. However, her decision to give up the Maths course without formally withdrawing did not fit into the confident successful group's identity. She had a hard fight to get to where she wanted to go and she may have had to develop a coping style that was too inflexible to deal with a minor failure. Carver and Scheier (1994) suggested that it was important to learn to deal differently with different types of stress.

The interdependency of factors

The largest group of factors that seemed interdependent were those dealing with life management. This group of factors comprised internal locus of control, being committed to life activities, a positive attitude to challenges and change (which also connected to the individual appraisal of threat in the traumatic factors), organisational ability and time management, hardiness and positive life management.

A comparison between D and H illustrated one way in which this cluster of factors might affect students.

D had been making her own decisions about her life since the age of 11, when she decided which secondary school to attend; through a mistaken choice of career, with which she stayed until she was qualified and had some work experience; and an unfortunate marriage followed by divorce. She emerged (at around the same age as H) with a career she liked, a life she loved, a partner with whom she had a good relationship and the knowledge that she was in control and managing her life positively. She said that she liked change and her divorce was a really positive change. Despite the fact that she had made several major mistakes in her life, she was always optimistic. She was an extremely hardy and confident individual.

H did not start to make her own decisions until she left school at 18. She also changed careers and had been divorced and was now remarried. Although she should have been confident, she was not sure of herself at all and hesitant about her possible success in study. She seemed to be rather dependent upon her second husband, withdrawing from courses twice to build up the marriage, and anxious about what he (and his parents) thought. For example, she was really grateful that he tidied up occasionally even though both of them worked fulltime at equally stressful jobs. She suffered considerable stress as a result of such disparate events as having assignments to do or having her in-laws to a meal. The impression gained was that this was someone who had always depended on her family and would now depend on her husband. This dependence meant that she was not building up her confidence and, at times, she did realise this; she wanted to be more independent.

"I became intrigued by other people and how their lives were affected by what they did or what they, did they bring it upon themselves or did they have control over it? I suppose to do with my own life too because I've had a few wee ups and downs and I wanted to understand how I could, em, take charge of things a lot more." (interview with H who formally withdrew)

This cluster of factors, to do with self-confidence and self-management, appeared in all the members of the persistent group. In the group that formally withdrew, neither E, F nor H exhibited the factors strongly, except that E was optimistic that he would return to study. G, the graduate, resembled the completing group.

In the group that withdrew without notifying the university, J and M were optimistic, but it sounded like the optimism of youth. They felt that there was plenty of time left for them to make decisions; they would not have thought about working out a life-plan towards which they could move.

"... and I know sitting here every day, but she is the one I have to see to first, you know, when she gets older I have all my time still ahead of me, so I have and as we know now they're going back to school at all ages, you know and getting their degrees and what have you, so, I've it still all to do." (interview with J who withdrew without notifying the university)

L, the other graduate, was similar to the successful group in her realistic plans for management of her life; and K was also positively managing his plans for research, though perhaps not for life. He dropped out when he became suddenly and severely ill but recovered and, by his own efforts, regained full health and returned to study.

A potentially interesting new factor emerged from the analysis of the interviews under the heading of intrinsic factors. Nine of the twelve respondents said they enjoyed learning, in most cases, loved learning and this seemed to be an important motive for starting to study.

"I suppose from the age of about 20,22, 23, that was it, I was just hooked on books from 23, especially on the ontological problem of being in existence, and I just read prolifically, you know, that kind of subject.....And I like to learn of new ideas in philosophy....I would be personally into esoteric studies as well as academic studies..."

(interview with K who withdrew without notifying the university)

This data emerged spontaneously; there was no question planned or used about liking learning or liking the courses. The three who did not mention a love of learning were J and M, both of whom tended towards instrumental motivation (needing qualifications for a job) and F, who disliked almost everything she did and whose self-confidence seemed to have been blighted by her one early failure, despite later success. Each member of the persistent group mentioned liking learning, as did the two graduates who were in the other groups. H was most enthusiastic about learning, saying that she could not pass a stand of leaflets without taking one of each to read so that she could learn something new. This attachment to learning has not been specifically mentioned or tested in any of the literature. However, here it appeared so regularly that it must be considered as a possibly important intrinsic factor

Summary of intrinsic factors

In reviewing the literature (Chapter 3, pp.58-78), it was found that all twelve factors that emerged were considered to be important.

These were: -

- motivation and persistence
- internal locus of control
- approach to learning
- commitment to life activities
- attitude to long-term goals
- attitude to challenges and change
- self-confidence
- optimism
- organisational ability and time management
- hardiness
- reflective personality
- positive life management and sense of coherence

The analysis of the data from the qualitative study supported the findings from the literature. It might then have seemed that all the factors needed to be considered equally to produce a prototype model but, as will be seen in the next section which integrates the results of the analysis of the data from the three areas of social and environmental, traumatic and intrinsic factors, the interdependent factors were able to be combined.

Identifying the factors for the model from the analysis

The pilot research served to corroborate many of the conclusions made in the literature, such as the need for self-confidence and support. It also introduced the idea that the enjoyment of learning was of importance. This indicated that perhaps students who embarked upon courses that they enjoyed were more likely to persist.

The data from the analysis enabled the original groups of factors to be reduced in number. By combining many of the factors that were similar in the research and by identifying factors that were interdependent, an overall list could be compiled. As the research was concerned with the factors that affect persistence, rather than drop-out, the factors were

rephrased so that a positive model, rather than a model of attrition, could be set up. At this stage, it was also possible to attempt to prioritise the importance of the factors, which seemed to fit into three levels: seminal, very important and less important (though if present in quantity, it was thought that the lower categories could affect student persistence).

In the area of social and environmental factors, it was possible to amalgamate the five support factors, as there appeared to be no evidence that the identity of the 'support-giver' mattered to the student. Juggling roles could be combined with conflict with family demands, and curtailment of social life. The effect of the social group had a negative effect in the cases of E and F but E had overcome this effect by eschewing family support and F endeavoured to make not very convincing jokes about her social group's sarcastic comments. It seemed that this effect could be either subsumed under the factor of juggling roles or support. It was more likely to be a lack of support that had affected F and E than the effect of their social group. Neither parental attitudes nor social, economic and educational advantage seemed to have affected persistence, except as support for students, so these two factors could be combined with support. Early educational experience was found to have had an effect, sometimes negative, as with E and F. The most positive effect was with B (who was the schoolteacher) and it was possible that this was affected by a learned attitude in her teacher training as well as by memories of her father. While many of the respondents remembered being happy at school, particularly in the persistent group, they did not suggest that their school had encouraged them educationally.

The data indicated that prioritising the factors from this area would produce the following hierarchy: -

Seminal	Support
Very important	Being able to juggle roles/family demands
Less important	Positive early educational experiences

The single most influential factor that emerged from the area of traumatic factors was the ability to cope with concerns and problems. There was no real evidence from the study that the type of coping strategy was of great importance, only that the individual *believed* that they could cope with whatever life produced. It would have been possible to combine this factor with the largest group of intrinsic factors, but an accretion of stressful happenings might have caused coping strategies to fail, as they so nearly did with C. Had it not been for the support that he received, he would have left a course which had been designed in a way that increased his stress levels considerably.

The perception of being poor health could have an immediate effect on study, but it did not seem to preclude re-joining the university as soon as circumstances permitted, as K did. The same result applied to family crises, as with H and L. Despite the anecdotal evidence of the strength of some students (pp. 122-123), illness and crises must, in many cases, render it physically and mentally impossible for students to continue with their study. It was therefore felt that these two factors should be kept in the model, although used in a specific manner, for the later research. It was thought that it would be a useful indication of student motivation and determination to identify their perception of the effect on their study if either crises or illness affected them or their families. Changes in lifestyle and a family illness caused E to leave, but again, this was only temporary.

The three types of stress identified in the literature (work stress, financial stress and any additional stress) were not found to have an identifiable effect on persistence, although it could not be totally discounted, since the evidence from the literature clearly identified

perceived stress as being a cause of withdrawal (Peters, 1992; Jegede and Kirkwood, 1994 and Garland 1993). These three factors could be combined into a single factor of 'any additional stress'. Dealing with additional stress might also have more to do with the intrinsic factors of optimism and hardiness, as might changes in any area of life.

Success in study was found to be important to students, as even those who appeared to have abundant self-confidence (for example, A, B and C) could be distressed by poor assignment grades or feeling that they did not understand the method of study.

Interaction with the institution had proved to be important, although there were differences between interaction with the tutors and the administrative side of the organisation. E did not attempt to approach the university to see whether he could defer his summer school because of his father's illness, and J was given advice from the university that did not meet her specific needs. There was evidence that not all the tutors were as useful as might be expected: K said: -

"I can't say that they've been unhelpful but, there's a tendency that you are disturbing people when you phone them at about 7 o'clock at night...there was one particular tutor, not mentioning any names, but I didn't like to phone him at all."

(interview with K who withdrew without notifying the university)

It is however probable, especially with distance learning, that students will regard *either* tutor *or* administrative contact as being a helpful or unhelpful face of the university and judge the organisation accordingly; so contact with any aspect of the university was seen as a single factor.

Despite the wealth of traumatic factors that could affect an adult learner, the most important factor of all identified from the literature and corroborated by the qualitative study was the ability to deal with crises when these arose (Výrost, 1997; Lovås et al, 1997). The importance of coping strategies in the fields of health psychology was

confirmed by Antonovsky (1993).

The final selection and prioritisation of the factors from the traumatic area was as follows: -

Seminal	Effective coping strategies
Very important	Success in study
Less important	No family/personal crises
	Good physical health
	Positive interaction with institution
	No new stress such as work-related/financial concerns

Of the intrinsic factors, all but two were found to be interdependent. The ten factors that could be combined to describe a type of student who could be expected to be persistent were: -

- being motivated and determined
- having an internal locus of control
- being committed to life's activities
- having a positive attitude to long-term goals
- having a positive attitude to challenges and change
- being self-confident
- being an optimist
- being able to organise study and manage time
- having a hardy personality (able to deal with crises competently)
- being able to perceive themselves as managing life positively and feeling that their lives had a coherent pattern

The literature, especially from health psychology, identified a type of personality who was most likely to recover from illness quickly and avoid stress-related illnesses altogether (Friedman 1991; Antonovsky 1993). The characteristics of these individuals were similar

to the ten factors identified from the literature. Educational researchers had also identified these characteristics (Scheier and Carver, 1992) as affecting students in higher education. Research carried out by Urzainqui Dominguez (1996), McVey et al. (1996), Kobasa (1979), Antonovsky (1993), Friedman (1991), MacKinnon-Slaney (1994) and others testify to the need for learners to challenge and control life rather than allow themselves to be controlled by circumstances. To succeed, an individual needs to be confident, able to manage life positively and feel in control of her/his destiny.

It was decided to combine these ten characteristics into a single factor which described the type of student who would be most likely to persist. From this section, then, the single most important factor or cluster of factors emerged, producing the individual most likely to succeed. The name given to this cluster of factors was 'life-challenger'. This, it was thought, described the individual most likely to persist.

Data from the qualitative study indicated that the approach to learning seemed to be important. The most rewarding approach seemed to be the strategic approach, as described by Entwistle (1996), adopted by all the successful students, as well as by some of the less successful ones such as L and K.

A reflective personality was helpful to student success. It was present in all of the students who had been successful and tended to be lacking in the students who had not yet succeeded, like E, J and F. As this was considered to be part of the strategic approach to learning, it was not treated as a separate factor.

Also from this section an extra factor emerged; a love of learning for its own sake. This was present for ten out of the twelve respondents. Only F and J did not mention a love of learning; J, possibly because of her instrumental attitude towards eventually having a

career with children and F, perhaps because of her disillusion with education. When it is remembered that there were actually six students who had been successful with the Open University in the sample (counting H and G with their previous degrees) and that another four specifically mentioned love of learning, this was a factor that needed to be taken into account.

The overall effect of this group of factors was: -

Seminal	Being a life challenger
Very important	Love of learning
Less important	Approach to learning

Combining the three areas of social and environmental factors, traumatic factors and intrinsic factors produced the following list: -

Seminal	Having support Adopting strong coping strategies Being a life challenger
Very important	Having a love of learning Being successful in study Being able to juggle roles
Less important	A strategic approach to learning No family/personal crises Positive early educational experiences Smooth interaction with institution/tutors Lack of new stressors - e.g. work-related/financial Good physical health

While many of these factors, identified and tentatively prioritised on the basis of the

qualitative study, appeared in the models reviewed in Chapter 2, there was little attempt made to outline a group of characteristics which might, together, delineate the persistent individual. While Bean & Metzner (1985), Garland (1993) and Kember (1995) included support in their models, this was as one of a number of features under more inclusive groups of headings. Being able to cope with study was highlighted by MacKinnon-Slaney (1994) and Garland (1993).

The models examined in Chapter 2 included factors such as educational competence (MacKinnon-Slaney 1994; Tillman 2002) and academic compatibility (Tinto, 1975; Kember 1995). These were found to be important for the current research in terms of interaction with the institution and success in study. It was concluded that measuring intellectual ability in adult learners would not necessarily affect persistence, although the planned quantitative research would include respondents' previous levels of education for analytical comparison. Many of the factors discovered in the study reported here concentrated on what would have been described as 'entry characteristics' by Tinto (1975) and 'external commitments' as suggested by Tillman (2002). Bean and Metzner (1985) used 'environmental variables' to describe outside influences on the learner as well as 'psychological outcomes', which was related to 'academic outcomes'; but they did not suggest that these might have been entry characteristics that could have influenced persistence. While Garland (1993) admitted the importance of factors such as study skills and the stress of maintaining multiple roles, she too seemed to rely on the student experience during study. While Kember (1995) believed that 'entry characteristics' were important for persistence, he did not feel that these were useful in his model as they could not be used to influence institutional policy. Only MacKinnon-Slaney (1994) included personal characteristics of learners as a factor that might have a serious effect upon persistence.

The reason for not attempting to define the personal characteristics of adult learners in the past could be that previous researchers may not have separated 'retention' from 'persistence'. Thus they may have concentrated upon institutional policies to retain students and perhaps neglected to search for factors that might predispose the adult learner to persist. This study contends that factors that affect adult learners may be present long before they begin to study as well as occurring during study. Personal characteristics, as well as life circumstances, may even predict the likelihood of persistence or drop out for the adult learner. The model described in the conclusion to this chapter builds on this possibility.

Conclusion and the model

Combining the factors found in the literature with the results of a small qualitative study made it feasible to reduce the overall factors likely to affect persistence from thirty-six to twelve and, also, to attempt to prioritise these as described above.

It was surmised that the student who was a life-challenger, had support and good coping strategies would be more likely to persist, as would the individual who was able to juggle roles, loved learning and was successful in study; but it could also happen that an accretion of what appeared to be less important factors could decrease a student's ability to persist. For example, even a life challenger might be forced to rationalise her position if she found herself without support, having to become carer to an ill child or an elderly parent, in addition to receiving poor grades on a current course. Such a student might well return if the pressures lifted, but there was no proof of that at this stage of the research so, although the following model did prioritise the factors, this was a tentative model, which was in need of a great deal of refinement. It was hoped that at least some of this

refinement might be achieved through the use of a quantitative study.

1 st level of importance	support	strong coping strategies	life challenger
2 nd level of importance	ability to juggle roles	success in study	love of learning
3 rd level of importance	positive early educational experiences	no family/ personal crises	strategic approach to learning
	smooth interaction with institution/ tutors	good physical health	lack of new stressors - eg - work-related/financial

Figure 5.2
A preliminary model of the relative importance of factors affecting persistence

This chapter reported the analysis of the qualitative data and integrated the factors from the literature to produce a model for initial testing. In order to test the viability of the factors and the model it was decided to plan, develop and implement a quantitative survey instrument that would be used with a much larger number of adult learners. The next chapter describes the methodology for the quantitative stage of the research.

Chapter 6

Methodology for the quantitative study

Introduction

This chapter describes the rationale for undertaking the quantitative study and continues with a description of the sample population and the timing of the survey. An outline of the propositions to be tested through the model and a definition of the terms used in the research follows. The questionnaire and statistical design are also discussed. The chapter concludes with a brief evaluation of the methodology.

Rationale for the use of the quantitative methodology

This research began by considering initial informal observations about part-time adult learners and adding more detailed and rigorous evidence from a literature review. The qualitative study was carried out, using in-depth interviews, in order to explore areas reviewed in the research literature, and as a means of identifying those factors that might be regarded as particularly contributing to the persistence of adult students. This method of approaching research can be described as a process of theory construction or grounded theory (de Vaus 1996) and essentially means that the researcher worked towards developing a theory based on evidence. Having developed a model from the identified theory, it was decided that data collection and initial testing should be carried out by using a postal questionnaire to reach as large a population as was practicable. Although information may be lost through the use of survey methodology, it remains an inexpensive and speedy method of gathering a great deal of information (Farnes 1992). Rosenmayr (1982) and Cornwell (1984) both concluded that a combination of qualitative and quantitative methodology was the most effective way to maximise the validity of research data.

A major concern with surveys is the possibility of a low rate of return. Frew & Weber (1995) noted an overall response rate of 40% to a questionnaire on retention with distance learners at Monash university; Jelfs received a 38% response to a postal survey of OUUK students in 1997 and McVey et al (1996) received a 65% return from a survey sent to adults who had completed a part-time degree in Belfast. Moser and Kalton (1971) list six problems of postal surveys to do with structure and implementation, but add that non-response in postal surveys is the main problem associated with this methodology. De Vaus (1996, p.107)), however, suggests that a well-designed questionnaire may produce a response rate somewhere between 60% and 75%. He also claims that the covering letter sent with a questionnaire is the most important factor in ensuring a response. He gives a list of points that will maximise returns: -

1. official letterhead
2. date on which the questionnaire is mailed
3. full name and address of the respondent (where available)
4. an explanation of the study's purpose and usefulness
5. an explanation of how the respondent was selected and the importance of their response
6. an assurance of confidentiality and a brief explanation of the identifying number of the questionnaire
7. an indication of what will be done with the results and an offer to make the results available
8. an offer to answer any question that might arise
9. a hand-written signature in blue ink that stands out as being personalised
10. position of researcher.

(de Vaus, 1996, p.117)

Lack of time precluded putting the student's name on the letter and handwriting the signature, but otherwise these suggestions were followed (a copy of the letter is in Appendix 6). The response to the questionnaire in this study was 74%, which was considered to be a successful outcome.

It was essential that the quantitative part of the study should be structured and carried out as objectively as possible. The work so far produced would have contained the researcher's own bias and personal areas of commitment, so it was thought that using quantitative methodology might help to reduce the effect of this bias.

The sample population

The choice of sample was based on practicality and was randomly selected from the Northern Ireland Open University student population who were studying in 2001. All were studying at undergraduate level and the selection was made from the central Open University database at Walton Hall. The selection comprised 1000 names and addresses, which was approximately one-third of the total Northern Ireland Open University student population, and no attempt was made to obtain a stratified sample. The questionnaire was finally sent to 990 students, as the sample taken had included eight students with Republic of Ireland addresses, one from Wales and one from Bristol. These were excluded to minimise as much of the sampling error as possible. The names of students who had been taught, or advised by, the researcher, were removed before the selection was made.

The sample was drawn one week before the first letter was sent out, to minimise the numbers of students who would leave their courses before the questionnaire was received. It was expected that this sample would probably also include some students who had stopped studying without informing the university; but it was hoped that these could be identified after the examination period. These students were, in fact, followed up manually after the final examination figures were provided. Because the examination figures for 2001 were available at this stage, it was possible to use completion, rather than success, used for the qualitative research, as a proxy for persistence. So the results discussed in chapters 6 and 7 are based on this premise.

The names and addresses for the main sample were taken from the Open University database CIRCE and numbered. The questionnaires were numbered to correspond to the database numbers. This meant that the students were promised confidentiality rather than anonymity, but it also meant that follow-up letters could be targeted, thus saving time and money.

The timing of the survey

The timing of the survey was important for the sample of students used. The questionnaire was planned to be sent to students in the first week in April 2001. This would avoid Easter which was towards the end of April in 2001. A stamped addressed envelope was sent with the survey as this has been shown to increase the response rate (Moser & Kalton 1979). Follow-up letters were sent out within ten days of the initial questionnaire. It was thought this would help to minimise the problem of error occurring if there were a large number of non-respondents, as can happen with postal surveys.

'...It is not ... the loss in sample numbers that is serious, but the likelihood that the non-respondents differ significantly from the respondents, so that estimates on the latter are biased.'
(Moser & Kalton 1979, p 262)

A third letter containing another stamped addressed envelope and a copy of the questionnaire was sent out one month after the original survey was posted.

A further reason to choose the beginning of the month was that, at the end of April, students receive a letter from Walton Hall via their region advising them that, if they wish to withdraw from their course, they may have some of their fee returned or change to a later presentation if they notify the regional office before the end of the month. By the first week in April, students would have been studying for about eight weeks, most would have submitted assignments and many would have received feedback on these.

The major points for withdrawal of Open University students are: -

- before registration; when they have not paid a fee.

- after registration and before the course begins; when their fee is returned to them.
- after the first assignment and the feedback for this; they can retrieve some of the fee.
- before the end of April; this is prompted by Student Support at Walton Hall, students can get two thirds of their fee back or carry this to a later presentation.
- before the end of June; students can get one third of their fee back or carry this to a later presentation.
- before the examination; in the late summer.

However, tutors and students have suggested that a turning point for decisions about staying or going is made when the studying actually starts; when the students receive the materials and begin to read them. Many who are lacking in confidence will decide in February that they do not want to continue and will not even attempt the first assignment. While tutors are required to contact students who have not submitted the first assignment within ten days after the cut-off date, this could be the end of March and students will have had two months to make their decision. By this stage, they would be far behind with their reading and will have put their attempt to start a course behind them. They are most unlikely to respond to requests to re-enter study.

The timing of the questionnaire was intended to exclude students who had not started the course. If the questionnaires had been sent out earlier, students might have been unsure about their commitment and ability; if later, the response might not have picked up those who decided to withdraw at the end of April. Responses from the latter category would be useful to help isolate factors that might contribute to lack of persistence. It was also useful to obtain responses at a reasonably early stage as this might include a group of students who would withdraw later in the year, and these could be used for comparison with the persistent students. This strategy proved useful and in fact, of the respondents who replied, 87 (12% of the total responses) formally withdrew after responding and 89 (12% of the total responses) withdrew without notifying the university. These two categories provided comparative data for the analysis. It was also discovered, by undertaking a manual count,

that of the non-responders, 75 (10% of the total sample) had withdrawn without notification and 69 (9% of the total) had formally dropped out. The figures as a percentage of the non-respondents were 29% for those who withdrew without notification and 27% for those who withdrew formally.

It can be seen that there was no 'best time' to administer the questionnaire; it was impossible to determine the number of students who had left their courses until the end of the academic year in October due to administrative constraints. A narrow window was used, but, even with hindsight, the same tactic would have been used as at least some students who later stopped studying were caught in the responses and were able to be used in the analysis.

A check was also carried out to identify any non-respondents who might have formally withdrawn. This again was done manually through the Open University database.

Hypotheses to be investigated

The theory to be tested stated that there are several factors affecting persistence and that a combination of these factors may increase or decrease the chances of student completion. Based on this theory and the evidence supporting it, there were identifiable conceptual propositions that could be put forward: -

- 1) Students who are supported will be more likely to complete their course of study
- 2) Students who can adopt relevant and flexible coping strategies will be more likely to complete their course of study
- 3) Students who are life challengers will be more likely to complete their course of study

These propositions related directly to the 1st level of importance of the model shown in Figure 5.2 (p.149). Obviously it was likely that persistent students might possess all of these characteristics, and certainly, it was probable that life challengers will have suitable coping strategies. The analysis of the collected data was expected to provide further

refinement here. The evidence so far collated seemed to suggest that this first level was the most important in the research.

At the 2nd level of importance, it was hypothesised that students to whom all of the identified factors apply would tend to persist; thus: -

- 4) Students who love learning, can juggle roles successfully and perceive that they are successful in their studies are more likely to complete their course of study

At the 3rd level of importance, it was postulated that students to whom all of the following factors apply would persist in their studies; thus: -

- 5) Students who:
 - have positive early educational experiences
 - adopt a strategic approach to study
 - interact successfully with the institution and tutors
 - have no family or personal crises during the academic year
 - have no additional stressors, such as work-based or financial pressures
 - maintain good physical health

are more likely to complete their course of study.

At the second and third levels, there was no evidence of the number of factors that would affect retention, nor of the ways in which these might interact. It was hoped that quantitative data gathered in the main survey of students could be utilised to provide at least some answers. It might also be shown that 1st level factors could be affected by an accretion of 2nd and/or 3rd level factors. Primarily, however, the quantitative data was intended to explore the importance of the effect of the factors on course completion.

Definition of terms

To provide some clarity in operationalisation, some of the terms used in the propositions needed to be defined. The definitions used were partly dependent upon the literature and partly on the results of the qualitative study (qual.st.) where extra definition was required.

Support -	<p>can be given by any person whom the student perceives to be important: -</p> <ul style="list-style-type: none"> immediate or extended family. friends or work colleagues. tutors or study support personnel. <p>(Garland 1993; Lunneborg 1994; Grace 1994; Blaxter & Tight 1994; qual.st.)</p>
Support -	<p>can be practical: -</p> <ul style="list-style-type: none"> childcare, housework, typing. emotional - showing an interest, encouraging intellectual - discussing the course themes, evaluating assignments <p>(Benshoff & Lewis 1992; Asbee & Simpson 1997; Heron 1997; qual.st.)</p>
Coping Strategies -	<p>applies to an individual who can cope by either collecting information and making her/his own decision or consulting and making a joint decision with, for example, tutor or peer group. An individual with good coping skills should be able to make use of both of these strategies at different times, demonstrating flexibility (Lazarus & Folkman 1984; Amirkhan 1990; Carver & Scheier 1994; Výrost 1997; Lovaš et al. 1997)</p>
Life challenger -	<p>is an individual who feels that s/he can influence events, feels a sense of coherence and is deeply involved in life activities, anticipating challenges or change rather than fearing them. (Kobasa 1979; Antonovsky 1993; Friedman 1991; MacKinnon-Slaney 1994; qual.st.)</p>
Loves learning -	<p>will be a student who enjoys the course s/he is studying, regardless of whether there is an instrumental need to complete the course (qual.st.)</p>
Juggles roles -	<p>this refers to a student who can deal with several roles in life and arrange these so as to make room for a further role as a student (Blaxter & Tight 1994; Kirkup and von Prümmer 1990; Morgan 1991; Woodley et al. 1986; qual.st.)</p>

Success in study -	refers to the ability of a student to perceive that s/he is succeeding in her/his studies, for example, by obtaining what are considered by the individual to be satisfactory grades (Lunneborg 1994; qual.st.)
Positive early educational experiences -	applies to a student who remembers primary and/or secondary school with enjoyment (Lunneborg 1994; Heron 1997; Lea 1996; qual.st.)
Strategic approach -	occurs when student manages time and organises learning to fit with the demands of assessment and the tutor's preferences. Also included is the student who takes a strategic and reflective approach to learning (Henderson & Nathanson 1984; Entwistle 1996)
Successful interaction with institution/tutors -	happens when the student understands and can manage the administrative tasks associated with maximising her/his use of university systems as well as using the tutor effectively for academic or other support (Garland 1993; Heron 1997; Bock 1996; Bird & Hailes 1996; qual.st.)
No family and/or personal crises	will apply when the student feels s/he is in a position to be able to manage family or personal crises without leaving a course, as well as perceiving that s/he is currently in possession of the resources required for successful study (Amirkhan 1990; Antonovsky 1993; Friedman 1991; MacKinnon-Slaney 1994; qual.st.)
No additional stressors, such as work-based or financial pressures	refers to the student who does not experience any further demands from outside sources and feels that s/he would continue to study if such pressure occurred (Antonovsky 1993; Friedman 1991; Lazarus & Folkman 1984; qual.st.)
Possession of good physical health	refers to the student who feels that s/he is healthy, has no expectation of becoming ill, and would try to continue if illness occurred (Friedman 1991; Peters 1992; Jegede & Kirkwood 1994; qual.st.).

The questionnaire design

It was thought to be important to produce a questionnaire that was not too long (Moser & Kalton 1971; de Vaus 1996), was interesting, had items that had, as far as possible, no apparent 'right' answer and was not too intrusive (A copy of the questionnaire is in Appendix 6).

The definitions covered in the last section included factors that could be examined by direct questioning; for instance, the existence of support for the student and the identity of the supporter(s). Other definitions were less simple; for example, indicators for the life challenger. There would be little point in asking the question 'Are you a life challenger?' Even after explanations of what a life challenger was, it would be unlikely to be a valid item. Any definition would be appealing to the student who might well allow wishful thinking to replace the truthful response. The literature had found several different aspects of the life challenger, so the indicators needed to be multiple, making the inclusion of a scaling question more practical. Dealing with a complex definition such as 'the life challenger' was thought to be more reliable with a multi-item scale as students would have more opportunities to respond on different aspects of the composite measure. It also meant that factors could be disaggregated or combined as required, so it provided more flexibility in analysis. Using multi-item scales also made the analysis more amenable to computer analysis (de Vaus 1996).

When constructing the questionnaire, the instruments used by Kember and MacKinnon-Slaney were examined for any areas or structure that fitted with the concerns in this study. Kember's Distance Education Student Progress Inventory (Kember 1995, pp.231-236) was based in part on the work of Entwistle and Ramsden, (1983), but mostly on the results of an earlier set of qualitative interviews. It is composed of a list of items to which students were asked to respond on a five point Likert scale. This was initially prepared for students

in the Far East and particularly Hong Kong. Several of the items on the scales were considered to be leading, steering the respondent towards an acceptable answer.

De Vaus (1996) suggests: -

"Try to ensure that respondents can give any answer without feeling that they are giving a wrong answer or a disapproved-of response". (de Vaus, 1996, p. 83)

So, for example, to ask a student whether they agreed or disagreed with the statement "I usually set out to understand thoroughly the meaning of what I am asked to read" would seem to lead the student towards the 'right' answer of 'definitely agree' (Kember 1995, p. 234). Also, the questionnaire, which was designed to measure student progress and success, did not deal with many of the factors isolated for the study being undertaken here.

However, for the questionnaire in this study, it was also important that, in an effort to obviate 'right' and 'respectable' answers, the questionnaire should not become so obscure that students would become confused.

MacKinnon-Slaney's Adult Persistence in Learning Model (APIL) was designed for the use of counsellors of adult part-time learners at an Ohio university in 1991. Her model has been used in other universities to help to identify possible barriers to persistence. For example, MacKinnon-Slaney quotes a study undertaken by Harrington et al (1992) which demonstrated that adults returning to study who had an external locus of control were more likely to view the university as less caring (MacKinnon-Slaney 1994). Her questionnaire was also based on a Likert Scale response, but her statements were more neutral than Kember's and it was less likely that the respondents would feel there was a 'right' answer to make. Examples of this neutrality were "At this moment in my life, I have the energy to face my responsibilities" and "I'm not sure if I'm getting all that I should out of my course". The APIL Scale items were thought to be more useful in the context of the present study and the questionnaire, therefore, followed her use of statements and some of the statements themselves (with permission from Professor MacKinnon-Slaney).

Another difference between Kember's and MacKinnon-Slaney's surveys was that in the former case, the demographic details were at the front of the questionnaire and in the latter, at the back. In the instrument devised for the present study, the demographic details were deliberately put at the end of the questionnaire: -

"Classification questions are usually left to the end of the interview so as to avoid crowding the opening minutes with personal questions". (Moser and Kalton 1971, p.315)

It was decided to follow de Vaus' suggestions on order of question for the construction of the questionnaire. He advised: -

"Commence with questions the respondent will enjoy answering

- a) These should be easily answered questions
 - b) Factual questions should be used initially
 - c) Do not start with demographic questions such as age, marital status etc.
 - d) Ensure that the initial questions are obviously relevant to the stated purpose of the survey"
- (de Vaus 1996, p. 94)

The survey was designed to be a mixture of closed- and open-ended items, with the emphasis being on questions which could be coded to a suitable computer programme such as SPSS. Open-ended questions were kept to those that could be reliably coded; and included 30 items based on a Likert Scale to test the students' perceptions of their study.

The layout was kept as simple as possible; there were four pages, printed back-to-back on two sheets, with instructions to students to turn over each page, which they all did.

The questionnaire began with straightforward questions about support, reasons for doing the course, feelings about the course and memories of their earlier education. The section with the Likert scale items followed. Some demographic questions were added, covering age range, gender, the number of years studying with the university and previous level of education. These were included because there was no clear evidence that these factors did not affect persistence. Other reasons for including these particular demographic data were: -

- learning for adult students is, by definition, a dynamic process (students must move on in their conceptual abilities if they are to succeed) so there might have been differences between students attributable to the length of time they had been studying (Beaty & Morgan 1992; Grace 1994)
- there might also have been differences between students because of their gender roles; better coping strategies might be required by women or perhaps juggling roles is more difficult for them (Kirkup & von Prümmer 1990; Clouder 1997)
- evidence about factors such as 'sense of coherence' suggest that adults reach this level in their late twenties or early thirties at the earliest and that it is based on their experiences in childhood and throughout the teenage years (Antonovsky 1993), so it was useful to know the student's age.
- the demographic data was structured in the same format as that collected annually by the Open University, so it should be possible to find out whether the results were generalisable to the rest of the United Kingdom, or, indeed, representative of the student population in Northern Ireland.

Although open-ended items needed to be kept to a minimum, it was felt that, because these were adult students who might well find that they were not asked about something that they thought was crucial to their study, a column was provided at the right hand side of the scale items and almost half a page for open-ended comments at the end of the questionnaire.

To increase the reliability of the questionnaire it was piloted with a small group of Honours level students who were studying in 2000. This was a 'participating pre-test' where the students were told that a questionnaire was being developed and asked to comment on: -

- changes in wording to improve clarity
- what they understood the questions to mean
- whether they would have liked any alternative available answers to closed items
- the length and ease of completion of the questionnaire
- the interest value of the questionnaire

the persuasive quality of the accompanying letter
the instructions for completing the questionnaire
inclusiveness of the scaling items

Most of these students were in their final or penultimate year. The few who were intending to register in the following year had their names removed from the sample lists so that they were not sent a questionnaire as part of the main survey.

The results of their returns (all of the students responded) showed that some minor amendments in the statements were required to clarify the meaning. These amendments were made and the final questionnaire produced.

Coding for analysis

Of the defined factors described earlier, several were amenable to simple Yes/No answers and it was unnecessary to construct multi-scale items. These factors were included at the beginning of the survey : -

- **support** - with the proviso that a question about the existence of encouragement before the student actually started studying would add strength to any claims to support while studying. It might also be useful to know who supported the student, so this was set up as a 'ticking exercise'.
- **love of learning** - this, again, was a simple ticking exercise for the student, with some distracters included to help avoid the student's giving the 'expected' answer.
- **early educational experiences** - a straightforward question, separating primary and secondary experiences.
- **success in study** – was again used as part of a 'select and tick' question.

This set of items was necessarily based on the perceptions of the students as to whether, for example, the student actually *had* support; or merely *thought* that s/he had support.

The remainder of the model factors needed to have inclusive indicators devised for each in a multi-scaling exercise. These were based on statements drawn from the definitions in the literature, many of which had been supported by data from the qualitative study. The statement number refers to the corresponding item in the Likert Scale section: -

The student who is a life challenger will: -

1. take responsibility for what happens in her/his life (Lefcourt 1976) **statement no.8**
2. believe that s/he can control or influence life's events (Kobasa 1979, p.3) **no.23**
3. have a positive attitude towards life (Friedman 1991; qual.st.) **no.15**
4. feel deeply involved in or committed to her/his life activities (Kobasa 1979, p. 3; qual.st.) **no.27**
5. anticipate change as an exciting challenge to further development (Kobasa 1979, p.3; qual.st.) **no.3**
6. believe that s/he has the resources to face life's demands (Antonovsky 1993, p. 205; qual.st.) **no. 20**
7. believe that life's demands are meaningful and explicable (Antonovsky 1993) **no.12**

The student with effective coping strategies will: -

8. neither avoid nor ignore problems (Lazarus & Folkman 1984) **statement no. 14**
9. define any problem and look for a range of solutions (Lazarus & Folkman 1984; Amirkhan 1990; qual.st.) **no. 26**
10. consult with others if necessary to help solve a problem (Amirkhan 1990; qual.st.) **no. 4**
11. demonstrate flexible coping through the use of appropriate coping styles - either independent decision-making or consultation (Carver & Scheier 1994; qual.st.) **no. 17**

The student who juggles roles successfully will: -

12. cut back on leisure interests to make time for study if necessary (Blaxter & Tight 1994) **statement no. 2**
13. 'make' time by studying late at night or early in the morning if necessary (Clouder 1997) **no. 21**
14. enlist the help of others to take on extra tasks to relieve the student (Kember 1994) **no. 9**

15. find time to study between the exercise of other roles - when travelling, at lunchtimes, when the house is empty (Blaxter & Tight 1994) no. 24

The student who adopts a strategic approach to learning will: -

16. manage time and effort consistently to cover the necessary study and assignments (Bernt & Bugbee Jnr. 1993; qual.st.) statement no. 5
17. learn to adapt to a more comprehension-based method of learning over time (Beaty & Morgan 1992; (Jarvis 1998; qual.st.) no. 25
18. study in order to achieve the best possible grades (Entwistle 1996; qual.st.) no. 13
19. be alert to assessment requirements and criteria (Entwistle 1996, p. 101) no. 18
20. gear work to the perceived preferences of the tutor (Entwistle 1996, p. 101; qual.st.) no. 28
21. be able to relate new learning to existing knowledge (Entwistle 1996; Gibbs 1980) no. 16

The student who interacts successfully with the tutor will: -

22. usually perceive the tutor's feedback to be helpful and of benefit to them (Jelfs 1998; qual.st.) statement no.1
23. wish to contact the tutor to build up a relationship, by attending tutorials or contacting the tutor by phone (Field 1993; qual.st.) no. 22
24. perceive that the tutor should be the main source of help and support (Jelfs 1998; qual.st.) no. 11
25. value tutorials from a competent tutor (Jelfs 1998; Thorpe et al 1986; qual.st.) no.7

The student who interacts effectively with the institution will: -

26. perceive advice and guidance from the regional office to be useful (qual.st.) statement no.6
27. know who to contact when they have a specific problem with their course (qual.st.) no. 10
28. manage choice of course and registration efficiently (qual.st.) no 19

The factors of family or personal crises, additional stressors and health were dealt with by using statements based on the student's perception of whether these *would* cause them to leave the course. Again, it was felt that what the student *thought* about a situation would be an important indication of their persistence.

All items were to be coded separately and the scale items subsequently combined into variables for the life-challenger, the person with coping strategies et cetera, as in the model (p. 150). The composite independent variables in the model were set up using SPSS. They were all entered as category variables and analysed as nominal data. It would have been possible to construct the variables for this exercise in other ways, as numerical values could have been set up to provide an interval scale, which would have been amenable to a larger range of inferential statistical analysis. However, within the scope of the current research, an important aim was to produce a model that could be tested and would allow the data to be used as a preliminary exploration, leaving a full scale inferential analysis as an area for further research.

All returned questionnaires were entered onto an SPSS database so that the variables might be more easily combined and manipulated for the analysis. In order to clarify the method for constructing the variable, an example of one is given below (a complete list of the construction of the variables is given in Appendix 7).

The scale responses were numbered from one to five, five being the highest indicator of persistence. Half of the actual statements were presented in the questionnaire in reverse order, to prevent respondents from attempting to following a pattern of ticking and to encourage them to read each statement carefully. These statements were reverse scored to facilitate the combination of variables. The five positions on the scale were labelled 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree' and 'strongly disagree' and as explained above this meant that half of the responses had 'strongly agree' as a score of five, and the other half had 'strongly disagree' as a score of five. The statements were phrased to facilitate this arrangement and presented in randomised order.

It was thought that as all responses had been made at a particular and individual moment in each student's life, and there may well have been other events engaging their attention at

the same time which would compromise their ability to persist, that it would be more realistic to combine the two highest and the two lowest scores and collapse the scale to three measurements for the new variables. This was managed by creating the new variables on SPSS. This meant that the respondent could score either 4 *or* 5 on an individual statement and still be identified as possessing the attribute in the model factor. Equally the respondent could score either 1 or 2 on each statement and, in either case, would *not* be defined as having the attribute. The new variable was therefore constructed using a mean score of four or more multiplied by the number of statements for a high score and a mean score of two or less for a low score on that item.

For example, the model factor of 'life-challenger' had seven statements in the Likert scale as indicators – statement numbers 3, 8, 12, 15, 20, 23 and 27. The score for a life-challenger became therefore: -

Life-challenger – Yes	score \geq 28 (7 statements x 4, maximum possible score=35)
Life-challenger – No	score \leq 14 (7 statements x 2, minimum possible score=7)
Life-challenger – Not yet	score is between 15 – 27

The third category, 'not yet' is based upon the concept that the life-challenger is not born with the attributes that may develop later. Research suggests that in fact, the life-challenger may not develop fully until thirty years of age or later. (Friedman 1991, Garland 1993). There will, of course, always be individuals who never develop good coping skills or ever become a life-challenger. Likewise the strategic learner will gradually learn to focus on and identify the priorities in a course or programme of study. So it was expected that for some of the factors there might have been a large 'central' (neither 'yes' nor 'no' group). The creation of the new variables also included some of the items from the bipolar items from the questionnaires, which lengthened the statements required to set up the model variables, but otherwise were completed in the same way. Support before starting was used in the analysis of the descriptive statistics, but not in the

analysis of the model factors as there was no evidence from the literature that this factor could be shown to contribute specifically to persistence in study.

Conclusion

This chapter has described the design and setting up of the quantitative study. Every effort was made to minimise error in the choice of sample, the implementation of the research and the design of the analysis. Evidence for each stage of the plan was sought from the literature and the qualitative study. However, it should be remembered that this study was completed using a range of adult learners from a single university and this will create problems of generalisability for the research outcomes.

The following chapter looks at the analysis of the data produced by the simple descriptive statistics gathered from the questionnaire .

Chapter 7

Results and discussion of the analysis of individual items from the questionnaire

Introduction

This chapter describes the outcomes from the initial section of the analysis of the quantitative study. The aim of the analysis at this level was to examine the results of the descriptive statistics and identify any items in the questionnaire that provided information that might contribute towards an understanding of the persistence of part-time adult learners. As the analysis progressed, it became evident that there was a wealth of information emerging at this level, as well as at the level of the model factors, and that there would be some difficulty in achieving coherence if all the results were to appear in one chapter without the corresponding discussion. So, contrary to the normal format for reporting research, the results and discussion have been combined and then divided into two chapters. This chapter reports both results and discussion of the individual items in the questionnaire with particular reference to a comparison of these results with the demographic status of the respondents. Chapter 8 discusses the results of the analysis of the model factors and their application to the preliminary model.

The chapter begins with some brief observations on the demographic status of the student respondents and the return of the questionnaires. Next the analysis of Section 1 of the questionnaire is reported, together with a discussion of any relevant points arising from this. The chapter concludes by discussing demographic differences between students who persisted and those who did not. Throughout this discussion of the section which looks at persistence, the students were divided into three groups, those who persisted, those who formally withdrew and those who withdrew without notifying the university. This step was taken because the results of the qualitative study (Chapter 5) had indicated that students who withdrew formally from their courses might have had more characteristics in

common with those who had persisted than they had with students who had withdrawn without notifying the university.

The demographic questions in the survey covered four items. The first was gender; the second, year of study; the third, the previous highest qualification before starting study with the university and the last was age. The 'year of study' item was divided into three categories: first year of study, when students might be expected to be less sure of what they were doing and whether they would be successful; second or third year of study, when students should have gained some confidence, but might still be unsure about their final goal; and fourth year and above, by which time students should be able to manage their time and organise their lives around their study.

The item on previous highest qualification had four categories, the fourth of which was 'other'. This category covered qualifications which the respondent was not able to fit into the other categories. These were recoded into one of the other three levels as appropriate.

Rather than asking a direct question on age; the item on age was divided into six bands; it was hoped this would encourage respondents to complete this question. The bands were: 65 and over, 50-59, 40-49, 30-39, 25-29 and under 25 years. It was decided to isolate the oldest and the youngest ages as it was felt that there might be differences between their attitudes towards study. For example, students who were over 65 years might be studying for recreation and because they wanted to keep their brains active. They might not wish to suffer the strain of a formal examination and thus might appear in the university statistics as students who had dropped out of their courses. There is some evidence that young students perform less well than other students and also that they have a higher dropout rate than older students (Ashby 1996, Slee 2001). Table 7.1 gives the complete list of demographic frequencies for the respondents in the sample.

Respondents and the return of the questionnaires

The date chosen for the final return of responses that would be used was 30 June 2001 and the number of returns was 735, out of 990 originally sent out. All the respondents, except for one who replied in January 2002, returned their questionnaires before that date.

Returns were just over 74% of the sample, which was an encouraging beginning to the analysis. The numbers counted on return dates at weekly intervals show 48.4% returned within 10 days, followed by a drop in rate, with a small rise after the second letter and another slightly larger rise after the third reminder. This was almost certainly due to the stamped addressed envelope and extra copy of the questionnaire sent in the third mailing. It was possible that the return might have been raised even further by using another mailing with a stamped addressed envelope; but the trade-off between cost and/or annoying those students who were being bombarded with questionnaires; and raising a few more responses, was not considered worthwhile. One student stated that he was angry about receiving the questionnaire, citing extreme overwork as the reason for his anger. A short letter of apology was sent to him as he might have been chosen as part of an Open University course survey in the future.

There were no real differences between the rates of return depending on gender or age. Marginally more continuing students responded within the first fortnight (56% as against 43% of first year students), but there were four times as many continuing students as first year students in the sample and it is known that more first year students leave their courses early in the year than do continuing students (Abbott and Ashby, Region 12 figures 2001).

A manual check of the non-respondents in August showed that of the 255 students who had not returned their questionnaires, 75 (10% of the total sample) had withdrawn without notification and 69 (9% of total sample) had formally dropped out. These figures had not been captured because of the time lag between students contacting the university and the updating of the database. The figures as a percentage of the non-respondents were 29%

and 27% respectively, so 56% of the non-responders were either on the point of leaving courses or had already left by the time the questionnaires were sent out.

This is a factor that needs to be considered in universities and other adult learning organisations where it is possible for students to withdraw from courses without notifying the university. Simply counting 'lack of response' figures may not reveal the reasons for what might seem to be large numbers of non-responders.

The measure of persistence in this part of the study was that a student should have completed a course by sitting the final examination, so the final data to be collected was the identification of respondents who had completed their courses and this came from the examinations section at the Open University once all the examination centre returns had been made for Northern Ireland. The total number of respondents who had completed their courses was 559 (just over 76%) and the respondents who had not completed numbered 176 (just under 24%).

Statistics were produced to show how the research sample compared with the Open University student population across Northern Ireland (Table 7.1, p. 173). All tests of significance throughout the analysis in Chapters 7 and 8 were produced using the Pearson χ^2 test as the variables were nominal or ordinal. The level of significance chosen was a maximum of $p \leq 0.05$. The results of these tests concluded that the sample was not significantly different from the Open University population in Northern Ireland in demographic factors 'gender' or 'previous educational qualifications', but that there were significant differences in 'year of study' and 'age of student'.

No attempt had been made to choose a representative sample: if that had been thought necessary, the sample drawn would have been a stratified random sample. A stratified sample was not selected simply because there was a total of thirteen demographic descriptors used and it was concluded that some of the groups would have been too small

to yield any valid information. Indeed, as the sample comprised one-third of the OUUK student population in Northern Ireland, some groups might have been completely unrepresented in a stratified sample.

A more effective means of testing reliability and reproducibility would be to repeat the research with another group of adult learners.

Table 7.1 - Sample demographic frequencies compared to Northern Ireland OU population frequencies

demographic group	sample frequencies	N. Ireland frequencies *
yr of study - first	19% (n=140)	45% (n=1667)
yr of study - continuing	81% (n=590)	55% (n=2053)
gender of student - male	53% (n=388)	54% (n=2024)
gender of student - female	47% (n=347)	46% (n=1696)
prev. ed. quals - A-level & above	70% (n=479)	67% (n=2221)
prev. ed. quals - O-level or equiv.	30% (n=215)	29% (n=953)
prev. ed. quals. - none	4% (n=32)	4% (n=138)
age - 65+	1% (n=10)	1% (n=40)
age - 50-64	11% (n=83)	7% (n=268)
age - 40-49	28% (n=202)	20% (n=743)
age - 30-39	41% (n=297)	40% (n=1492)
age - 25-29	14% (n=101)	19% (n=706)
age - <25	5% (n=37)	13% (n=471)

* Northern Ireland statistics from internal figures from the Institute of Educational Technology (Slee 2001). These did not differentiate between different year of study for continuing students.

Descriptive statistics from the individual questionnaire items

A preliminary exploration of the data collected from the initial section of the questionnaire (Appendix 6) provided considerable information about Open University students and in some cases, corroborated research already completed. This first section asked students about support before and during their studies, reasons for study, their perception of how they were performing and their early educational experiences. The majority of these items were subsequently used in the model factors, but on their own provided some useful information about persistence. The second section consisted of the 30 Likert-scale statements and the third and last section included the demographics and a final item on new crises during study, which was later included in the variables for the model factors. Both the second and third sections are discussed in Chapter 8.

Except where stated, all percentages reported in this chapter are rounded to the nearest whole numbers. In the initial section, respondents were asked to choose as many categories as applied to them, so the summed totals are more than 100% in some of the tables.

Level of support before starting study - Questionnaire, Item 1

The highest level of support afforded to students before they registered came, as might be expected, from their spouse/partner at 56% (Table 7.2). The next most frequent groups were parents and friends at 23% and 22% respectively. Work colleagues and siblings were similar at 18% for work colleagues and 18% for siblings. 14% of intending students did not tell anyone of their plans. Almost without exception, support from persons other than these groups were the student's child or children.

Table 7.2 – support before start of study.

support before from:	spouse/ partner	parent(s)	siblings	friend(s)	work coll.	didn't tell anyone	other
yes	56%	23%	18%	22%	18%	14%	6%
n=	407	171	128	164	135	102	47

Throughout the research it had been assumed that it was important to know whether there were any differences between the support asked for or offered to men and women. The literature on support indicates that more men than women are likely to be supported by their partners. Grace (1994) and Kirkup and von Prümmer (1990), reported that women were less likely to be supported by male partners than men were to be supported by female partners. This research suggested that mothers of young children were expected to remain responsible for child care despite studying and that this caused extra stress to their student role. The qualitative research undertaken for the study reported here (Chapter 5) also highlighted support as very important for both men and women but did not differentiate between the types of support offered by males or females.

In this study, crosstabulations of the support categories with gender showed considerable differences in the perceived support of men and women.

Table 7.3 – support before start of study by gender for each support category

support before from:	males total (n=388)	females total (n=347)
spouse/partner	58% (n=224)	53% (n=183)
parent	16% (n=61)	32% (n=110)
sibling	10% (n=37)	26% (n=91)
friend	15% (n=57)	31% (n=108)
work colleague	23% (n=87)	14% (n=48)
didn't tell anyone	15% (n=58)	13% (n=44)
other	5% (n=21)	8% (n=26)

As explained above, respondents could select as many of the categories as applied to them, so the columns here total more than 100%. There are some important differences here, such as the difference in support received by men and women from parents, siblings and friends. One of the reasons for this may have been that women felt it more important to consult with family and friends before undertaking study. Trewsdale et al quote figures that state that: -

"In Great Britain, 22% of men and 27% of women think that 'a husband's job is to earn the money, a wife's job is to look after the home and family'. In Northern Ireland, however, 42% of women and 47% of men in 1995 agreed with this statement."
(Trewsdale et al 1999)

However, aspiring students may not actually have told many people about their plans in case these did not come to fruition. They would become more ‘visible’ once they began to study and support might be sought from more people once they had started their course. So it might be expected that there would have been differences between support before and support during the study. It may have been easy to encourage a family member to take up study and even to help for a while, but part-time study takes many years and supporters can tire of offering constant support (Carver & Scheier 1994).

Level of support since starting study - Questionnaire, Item 2

However, supporters did not tire as can be seen from Table 7.4 which shows that once students had started their course, all categories of perceived support increased and the group of students who had not told anyone about their studies fell to just over 4%. Additionally, support from other students was added and 22% of students benefited from this.

Table 7.4 – support since start of study - frequencies

support from:	spouse/ partner	parent(s)	sibling(s)	friend(s)	other students	work coll.	didn't tell anyone	other
yes	66%	29%	22%	29%	22%	27%	4%	9%
n=	487	210	162	214	163	196	32	65

While the number of respondents receiving no support had fallen to 4%, and the numbers in this group are small, there might be some non-respondents who had also not received support. Crosstabulating completion rates with students who did not tell anyone they were studying revealed that only 53% (n=17) of this group completed the year, so 47% (n=15) dropped out. If those who stopped studying in this relatively small sample are 47% of 4% of the student population; and these figures are extrapolated to the whole of the student undergraduate population of the Open University in the United Kingdom; this would indicate that a minimum of 3,264 students who had received no support could be expected to leave during any one year. While this figure would probably be lower for those adult learners attending courses with more traditional methods of teaching and attendance (Rickwood and Goodwin 1996), these figures do perhaps indicate a problem with students who are not willing to talk with family and friends about their study.

Using age as a factor showed that the older the student, the less likely they were to tell anyone that they were studying. The numbers in the two older groups, however, were too small to provide valid evidence.

As with support before studying, gender differences emerged, shown in Table 7.5.

Table 7.5 – support since start of study by gender for each support category

support since start from:	males total (n=388)	females total (n=347)
spouse/partner	70% (n=269)	63% (n=218)
parent	21% (n=82)	37% (n=128)
sibling(s)	15% (n=58)	30% (n=104)
friend(s)	20% (n=77)	40% (n=137)
other students	25% (n=114)	20% (n=82)
work coll.	30% (n=95)	24% (n=68)
didn't tell anyone	7% (n=25)	2% (n=7)
other	7% (n=28)	11% (n=37)

Table 7.5 shows the numbers and frequencies of total male and female respondents supported – e.g. - of all female respondents, 63% were supported by their spouses or partners: and of all male respondents, 70% were supported by spouses or partners. There were significant differences in support ($p \leq 0.05$) between men and women in the categories of parents, siblings and friends, with more women perceiving that they had support from these groups. It was also noted that more men than women said they had support from other students. This is interesting because research suggests that women are more likely to value tutorials and interaction with tutors and students than men are (Kirkup and von Prümmer, 1990). While studies have considered the problems of women returning to study (Lunneborg 1994; Kirkup and von Prümmer 1990; Heron 1997), little research into student persistence has considered the differences between the needs of male and female adult learners for support, although Clouder does suggest that returning to higher education for women may destabilise existing interpersonal relationships (Clouder 1996).

While these results may merely reflect aspects of difference in perception between men and women, the important implication for educational establishments is that it is necessary to ensure that both men and women have the support they require. It is often presumed that if adult students have support from a partner or spouse, then this will be sufficient to keep them motivated in their study, but it could well be that women students will require alternative additional sources of support. All but two of the respondents chose more than one option and of the 65 who selected the 'other' option, 49 mentioned their children as supporters (this information was extracted manually from the database).

In the qualitative study, reported in Chapter 6, two women who withdrew from their courses mentioned the opinions of their friends and siblings, in both cases negatively: -

' "...and they (friends and colleagues at work) all had a good laugh at me of course, not a very - well that doesn't matter really - it's all par for the course - .they all thought it was a great hoot. Having

said that - they laughed when I told them what I was doing in the first place and they thought I was quite mad..."
(interview with F who formally withdrew)

'Interviewer: "They're not interested?"

" No, for them (siblings) I was talking a load of babble, when I would have come out and spouted things, you know - 'you're talking a load of babble'"
(interview with J who withdrew without notification)

Although these remarks were made lightly by the respondents, it was possible to see that the lack of support had hurt and possibly helped to lower the students' self-confidence. If a student is less than confident before starting to study, hilarity and ridicule from friends, family or colleagues once they have begun to study will not improve the level of self-esteem. A less confident individual may well need the good opinion of those they consider to be important to them and this may be more influential than motivation to learn. Encouragement for students before they begin to study seems to be an important factor in motivating them and this is supported by the research (Ajzen and Fishbein 1980; Bean & Metzner 1985). A fuller discussion of support during study is provided in Chapter 8 which deals with the analysis and discussion of the model factors.

When previous educational levels were crosstabulated against support from the various categories, only support from parent(s) showed a significant difference between the three groups of 'A level or higher', 'GCSE/O level or equivalent' and 'no previous qualifications'. This was significant at $p < 0.05$. 31% of students with A-level or higher, 27% with GCSE or equivalent and 9% with no previous educational qualifications were supported by their parents. It would be possible to assume that the parents of students with A-levels or higher may also have had higher educational qualifications, but there is no way of knowing this without further research. It might equally well be that supporting parents want to see children advance in their career and see education as the best means of accomplishing this.

Reasons for studying - Questionnaire, Item 3

The most important reason for starting to study was given as 'keeping my brain active'.

The more functional reasons were clustered further down the scale as in Table 7.6.

Table 7.6 – reasons for study - frequencies

reasons for study	get a job	enjoy study	promotion	keep brain active	change job	really like course	other
frequencies	22%	37%	21%	57%	40%	33%	21%
n=	163	275	157	422	290	245	154

‘Love of learning’ was a factor identified from the qualitative analysis (reported in Chapter 5) and it appeared from the data that 37% of respondents enjoyed study and 33% really liked the course they were studying.

The crosstabulation with gender (Table 7.7), reports the numbers and frequencies of respondents within the total sample who chose the various options, e.g., 26% of all female respondents and 19% of all male respondents chose 'get a job' as one reason for study.

The results showed small differences in some categories; rather more in others. The categories were divided into two groups: instrumental, which included getting a job, gaining promotion and a desire to change jobs: and affective, which included enjoying study, keeping the brain active and really liking the course they were doing. Of those giving instrumental reasons for study, the results from the data indicated that more men than women chose 'promotion', while more women than men chose 'get a job'.

Table 7.7 – reasons for study by gender responses

reasons for study	male total (n=388)	female total (n=347)
get a job	19% (n=74)	26% (n=89)
enjoy study	38% (n=148)	37% (n=127)
promotion	25% (n=96)	18% (n=61)
keep brain active	56% (n=217)	60% (n=205)
change jobs	39% (n=152)	40% (n=138)
really like course	31% (n=122)	36% (n=123)
other	20% (n=79)	22% (n=75)

Although there were no significant differences between men and women in this question (for example, only 89 out of a total of 347 women chose 'get a job'), the data may reflect the society in which we live, where women have often been either without jobs or have worked part-time in traditional 'caring' jobs for low wages because of family responsibilities (Dallos and Sapsford 1997). It might also reflect lower expectations in women, although in fact, more men than women said that they enjoyed study and wanted to keep their brains active.

There were expected to be some differences between the various age groups and this was indeed the case; the data showed that the students who were 65 and over gave 'keeping my brain active' and 'loving the course' as their main choices, thus contributing to the obvious thesis that they were studying for pleasure and not for career-related reasons. Apart from this, there were no significant differences between any of the other age groups, nor were there differences attributable to the year of study or the previous educational qualifications.

There were, however, 21% of the students who chose 'other' as one of their reasons for studying (154 respondents). Students were asked to describe these 'other' reasons for studying, and although these responses were not coded, a manual count showed that there were two major groups of responses. The first was from students who were completing qualifications or updating skills and the second group included those who were studying to raise their self-esteem, increase their confidence or make up for lost opportunities. A typical response was: -

"I want to prove to myself I can do it. I didn't have the opportunity to go to university when I was young. This is for myself." (response from student 303)

This was an interesting group. The literature has shown that self-confidence is necessary for persistence (McVey et al. 1996; Alsagoff & Dasuki, 1988; Hibbett, 1986; Gibson, 1991; MacKinnon-Slaney, 1994), yet here was a group of 89 students who hoped to gain confidence from achieving success in their studies.

There was a third small group who wanted to help their children or, in two cases, their grandchildren, with their education.

The conclusion from this item may be that students do not necessarily have a single reason for beginning to study; they may just want to do something that they see as progression, whether personal or career-related. There was ample evidence of this in the qualitative analysis, where there were few who knew specifically the use to which they would put their qualifications:

".. I didn't want to do a job-related degree and I'm actually quite interested in social studies...so I thought if I did a degree in that...it's like a finger in another pie, it's another option..."
(interview with D who completed)

"I wanted to learn, to understand [people]...and I thought that studying something like psychology would help...I suppose to do with my own life too because I've had a few wee ups and downs and I wanted to understand how I could take charge of things a lot more..."
(interview with H who formally withdrew)

"..trying to get some of those wee bits of paper that you need for the security - that, I suppose was the main reason - felt I had never challenged myself enough recently- in the past few years.."
(interview with M, who withdrew without notification)

The data shows that adult students do not necessarily always have a clear vision of where they are going in terms of a career. Universities may take the view that their students have a life plan, but this is not always the case.

When the analysis from crosstabulating reasons for studying with previous educational qualifications was completed, there was only one significant difference between the groups of students with various levels of educational qualifications ($p < 0.01$). This was in the option chosen by those with an interest in promotion. 25% of students with A-level or higher qualifications, 17% of those with GCSE or equivalent and 6% of students with no previous qualifications gave as a reason for studying that they wanted to gain promotion. This implies that further study was being undertaken by those who were already well qualified academically, but who felt that they needed to go further in order to gain promotion. This would also fit Jarvis' (2001) statement that workers would have to constantly upgrade their skills and knowledge in today's technological world.

Students' feelings about their course - Questionnaire, Item 4

When asked about their perception of how they were coping with their course, 42% of respondents thought they were succeeding, although only 23% thought they were in control of their study. 53% thought they were a bit behind and 33% thought they wouldn't have time to do it all. 41% thought they were getting reasonably good grades.

Table 7.8 - feelings about course - frequencies

feelings about study selected	succeeding	a bit behind	in control	reasonably good grades	won't have time to do it all
percentages choosing option	42%	53%	23%	41%	33%
numbers in each group	305	390	167	302	241

This data gave a picture of students, many of whom were quite unsure that they were making much progress at all. It must be remembered that the questionnaire was completed by most respondents during the second month of their course and they may not have had sufficient, or any, feedback from their tutor. Even at this stage, 53% thought they were 'a bit behind' and just 42% thought they were 'succeeding'. The first year students were least likely to feel that they were succeeding and crosstabulations showed a significant difference between new students and those in their second or later year ($p<0.03$) on this option.

Table 7.9 - crosstabulation of year of study by option 'feel you are succeeding'

succeeding	1 st year	2 nd /3 rd year	4 th year or above
yes	16% (n=50)	41% (n=126)	42% (n=128)

This was perhaps not unexpected, as new students might not yet (in April) be aware of the criteria for success for a course that they had only begun in February. While those who had completed an assignment might have had some feedback, they still might not have been sure whether the grade they had received constituted 'success' in their terms,

especially if they had not been able to compare this with the results of other students. It might be that adult learners with a regular attendance pattern would be clearer about their progress than distance learners. For many adults, whose academic capability has not been 'judged' since school, the importance of the first mark or grade must be seminal to their progress. The results of the analysis also show that, as Northedge suggested, the first year of study is a 'culture shock' for returning learners (Northedge, quoted in Grace, 1994, p.14). Lea, in her qualitative work with Open University students, noted a need for new students to become accustomed to academic language (Lea 1996).

Figures obtained by crosstabulating responses by gender in this question (Table 7.10) indicated that study experiences of men and women may be different.

Table 7.10 – feelings about study by gender

feelings about study	male agreeing (n=388)	female agreeing (n=347)
succeeding	47% (n=182)	36% (n=123)
a bit behind	51% (n=196)	56% (n=194)
in control	27% (n=103)	19% (n=64)
reasonably good grades	44% (n=170)	38% (n=132)
won't have time to do all	29% (n=111)	38% (n=130)

Table 7.10 shows frequencies of respondents in the total sample who chose each option; e. g. – 47% of all males and 36% of all females responding positively to this statement thought they were succeeding.

While (less than one-third of the way into their course) over half of all men and women felt they were 'a bit behind' with their studies, there were considerable differences in how they thought they were performing. Despite the numbers who admitted to feeling they were behind, less than one-third of the men thought they wouldn't have time to do it all, while more women than men were not certain about their ability to complete the reading. There

were significant differences ($p < 0.01$) between men and women on the options 'succeeding', 'being in control' and 'won't have time to do it all'. In the first two options men were more confident and in the third, conversely, significantly more women than men thought that they wouldn't have time to do all the study. However, it should be remembered that overall only 33% of the students thought they wouldn't have time to study everything.

The literature on student characteristics generally does not differentiate between men and women in attributing levels of confidence. Work has been produced on the different needs of women from men (Kirkup and von Prümmer, 1990; Gibson, 1991), rather than the effect these differences may have on their levels of confidence. However, it does appear from the results reported here that women may be more likely to lack confidence in their ability to be successful in study.

When the age groups were crosstabulated against the options in this question, there was not found to be any statistically significant result, indicating that age may not be a factor in students' perceptions of success.

It was thought that this item, when measured against previous educational qualifications, might show that the higher the previous qualification, the more likely the student would be to feel s/he was succeeding. However, crosstabulations produced only one significant difference between the groups and that was students' perception that they were getting reasonably good grades ($p < 0.01$). 45% of those with higher levels of qualifications, 34% of those with GCSE or equivalent and 25% of those with no previous educational qualifications felt that they were getting reasonably good grades. In all of the other options, although the students with higher level qualifications had slightly higher numbers, there was little difference between groups.

Early educational experiences - Questionnaire, Item 5

Item 5 was a straightforward item asking respondents to indicate whether they had been 'happy most of the time' or 'unhappy most of the time' at primary and secondary school: separate responses were required for each type of school. 57% were 'happy most of the time' at primary school and 53% at secondary school. That reveals a considerable minority of 42% of students who were 'unhappy most of the time' at primary school and 46% who were 'unhappy most of the time' at secondary school (Table 7.11).

Table 7.11 - early educational experience - frequencies

happy most of the time at:	yes	n=	no	n=
primary school	57%	422	42%	308
secondary school	53%	388	46%	341

Early educational experiences had appeared frequently in the literature (Lunneborg 1994 & 1997, Woodley et al 1997); as well as in the qualitative study: -

Interviewer: "what do you remember about primary and secondary school?"

E: "I hated it. Yes I really hated school. Couldn't get away soon enough. Everybody left as soon as they could get out of the place"
(interview with E, who withdrew formally)

As will be noted later, when the two scores were combined to produce one of the model factors, there was actually a majority of respondents who were mostly unhappy at *either* primary *or* secondary school. There is plenty of evidence in the literature to indicate that children were often, for a variety of reasons, unhappy at school. Lunneborg quoted examples of girls who were not encouraged to study sciences at mixed sex schools or who were not allowed by parents to take up university places because of cultural attitudes. She also described the experience of boys who were expected to leave school as soon as possible and take up a trade or earn money for the household (Lunneborg 1994 and 1997). There is also evidence that gender and class have an influence on expectations for children; and pressures from parents and teachers can result in unhappiness (Lea 1996). Heron's

research with women reveals that they were accounted 'stupid' by teachers in school (Heron 1997). This research goes further and suggests that the result of this failure to thrive at school leads to a loss of confidence and self-esteem, especially for women. Expectations can be shattered at as early a stage as 11, when children 'fail' an examination that, in many cases, defines their school and career options:

Interviewer: "Right then- you said you failed your 11+ - did this? Was this important?"

F "Yes, 'cos I remember being told I'd failed it, and that was just...my whole life was over - that was it - I wasn't going to university, I wasn't - that was it, because I'd always been told 'you're going and that's it' and suddenly you know I wasn't going or at least that's what I thought..."

(interview with F who formally withdrew)

Crosstabulation by gender showed that 56% of men were happy at primary school as opposed to 44% of women, while 55% of men were happy at secondary school as against 46% of women.

Table 7.12 – early educational experience by age bands

age band	total n=	65+	50-64	40-49	30-39	25-29	<25
happy at primary school	726	56% (n=5)	45% (n=37)	58% (n=116)	58% (n=172)	67% (n=68)	60% (n=37)
happy at secondary school	725	50% (n=5)	42% (n=34)	58% (n=117)	50% (n=146)	66% (n=67)	43% (n=16)

Crosstabulating happiness against age (Table 7.12) showed that the age band 25-29 was happier at secondary school than any other group. There was also a tendency for older students in the 50-64 group to have been less happy at both primary and secondary schools; and the under 25 group also seemed to have been less happy at secondary school. There were significant differences between the age groups' experience in secondary schools ($p<0.01$).

When interpreting this data, it is important to remember that the results depend upon the memories of the respondents and their remembered perception of their experiences at school.

As adults progress in their undergraduate studies, they might be expected to adopt one of two attitudes to their schooldays. On the one hand, they might begin to remember their schooldays more fondly as they achieve success: on the other hand, they might well adopt the view that they are succeeding despite unhappy schooldays. It might also be expected that students who had higher previous educational qualifications on entry to the university would remember their schooldays more fondly, as presumably they had been successful at that time. However, crosstabulating year of study with early educational experience produced no statistical difference between first year, second /third year, or fourth year and beyond. Crosstabulating previous education qualifications with early educational experience also showed no significant differences.

To sum up, it is probably more important to say that the data gathered in this study provides support for the thesis that there is a large proportion of the Open University population that has had less than happy experiences at school, as identified by Lunneborg (1994).

Summary of descriptive statistics - Questionnaire, Section 1

From the reviewed literature and the qualitative research reported in Chapter 5, it seemed that there was evidence that one of the most important factors was support for the student and this evidence was corroborated by the data from this study. Although there is less evidence in the literature about the type of support given and who provides it, more men than women are supported by their partners, and women appeared to have more support than men did from parents, siblings and friends. These results applied whether the data reported support before starting or support since starting to study. Women may have told more people about their intentions before registering, or, possibly, consulted with their parents, friends or siblings more readily than men. Whatever the reason, it was important to note that women wanted, and got, more support from a wider group of people than men did. It was also interesting to see that one in five of the female respondents got support

from other students, fewer than men, one quarter of whom felt supported by other students. The 'year of study' did not seem to affect student support, but those who already had studied at A-level or above were significantly more likely to be supported by their parents than those with lower previous levels of achievement ($p < 0.05$). In the qualitative study reported in chapter 5, it was noted that persistent students were supported by individuals who were themselves studying. It is possible that a supporter who is used to study, or has some academic skills, may have a considerable positive effect on another student's motivation and determination. It is also possible that women do not just have difficulties with the multiplicity of roles identified in the literature (Kirkup and von Prümmer, 1990; Clouder, 1997; Heron, 1997), but actually require different levels and degrees of support for their study.

When crosstabulations of gender against the option of 'support from others' was produced for each of the two items 'support before' and 'support since', women were more likely to be supported by other individuals or groups, although the difference was not significant.

In the item on 'reasons for study', the data indicated that women were slightly more interested in getting a job than were men; and fewer women than men were interested in promotion or changing jobs (Table 7.7; frequencies). An interesting result was that more than one in five of the students chose 'other' as a reason and a major reason given by respondents was about increasing self-esteem and confidence and proving to themselves that they were capable of study at this level. This result, combined with the fact that 'keep my brain active' and 'really like the course' scored well in Table 7.7, may indicate that students, indeed, do not have a life-plan, but a need to make what they see as progress.

Students' perceptions about their course progress were also revealing. The only option where more than 50% was registered was in being 'a bit behind' and there were no significant differences between first and subsequent year students. More surprisingly,

there was only one significant difference when the positive options were crosstabulated against 'previous level of education' (The positive options were 'succeeding', 'feel in control', 'getting reasonably good grades') and the difference occurred in the option 'reasonably good grades' ($p < 0.01$). However, the most important conclusion from this item was that women were less confident about their progress than men were.

Significantly fewer felt they were succeeding or in control ($p < 0.01$) and significantly more felt they 'wouldn't have time to do it all' ($p < 0.01$).

Many students entering higher education can be expected to have had negative experiences at school and this may affect their approach to learning.

The final section in this chapter looks at the completion rates of the persistent and non-persistent students and the measurement of these against the demographic statistics.

Persistence and the demographics

The dependent variable, which was persistence, was indicated by student completion for the purposes of the analysis. As discussed in Chapter 6 (p.152), it was possible to identify the students in the sample who had completed their course. The dependent variable was initially coded to three values: –

- (1) students who completed
- (2) students who formally withdrew
- (3) students who left without notifying the university

This was done because the qualitative analysis, reported in Chapter 5, had shown that students who had formally withdrawn resembled the persistent learners more than they resembled the students who had not notified the university that they were leaving. In the initial multivariate analysis which will be described in Chapter 8, the analysis was carried out using the three separate categories as above, combining (1) and (2) and combining (2) and (3). However, further information accrued from the crosstabulations of the factors of

'previous educational qualifications', 'year of study', 'gender' and 'age' against the three categories of completion, formally withdrawing and withdrawing without notifying the university. These crosstabulations are presented in Tables 7.13 - 7.16. All figures have been rounded up to the nearest whole figure except where indicated.

Table 7.13 shows the crosstabulation of completion with year of study. This item was sub-divided into three categories on the questionnaire as shown because it was suggested in the literature that the nearer students came to a degree, the more likely they were to persist (Woodley & Parlett, 1983).

Table 7.13 - completion by year of study

year of study	total numbers in sample for each year	completed	formally withdrew	withdrew without notifying university
first year	140	74% (n=104)	13% (n=18)	13% (n=18)
2nd/3rd year	323	77% (n=249)	10% (n=31)	13% (n=43)
4th year and beyond	267	76% (n=203)	14% (n=36)	11% (n=28)

Table 7.13 shows that 74% of first year students completed, 77% of those in second or third year and 76% of those in fourth year or beyond. There was no statistically significant difference found between the percentages of students in each group in any of the three outcome categories, despite the differences in the overall sizes of the three year groups. This was unexpected, given that studies show that first year students are particularly vulnerable and more likely to leave courses than continuing students (Ashby 1996).

It was expected that students with higher previous educational qualifications would be more likely to complete, if only because they should have learned the skills necessary to cope with academic study. This was, in fact, the case, although there was no statistically

significant difference found between the three categories of previous qualifications. This can be seen in Table 7.14 which shows the numbers and percentages of students with different levels of previous education, e.g. 79% of students who completed had previously studied at A-level or higher.

Table 7.14 - completion by previous educational experience

prev. educ. qualification	total numbers in sample with each level of qualification	completed	formally withdrew	withdrew without notifying university
A-level or above	479	79% (n=378)	11% (n=53)	10% (n=48)
O-level or equivalent	215	72% (n=154)	13% (n=27)	16% (n=34)
no prev. qualification	32	66% (n=21)	13% (n=4)	22% (n=7)

It also shows that there was a large majority of respondents in the study who had high level previous qualifications. These figures are similar to the internal regional figures produced by Abbott and Ashby (2001). The most pertinent comment that can be made about this data is that it is disappointing, though not unexpected (Woodley et al, 1987), to see so few students with lower previous qualifications registering for adult learning.

The data indicates that students with higher previous qualifications are more likely to complete; but there is little difference noted between the levels in the group that formally withdrew. Almost a quarter of students with *no* previous qualifications withdrew without notifying the university as against just one in ten students with A-levels or higher levels of education. While this is borne out by the university figures (Slee 2001), it is possible to wonder whether this dropout is dependent on educational levels or whether it has more to do with useful support for the vulnerable student. The group with no previous qualifications is very small, thus making the frequencies possibly rather less reliable as measurements.

Table 7.15 shows that 75% of female respondents completed, fewer than the 77% of male respondents who finished. Fewer women than men completed, more women than men formally withdrew and more men than women left without notifying the university.

Formal withdrawal is often made because the student can transfer part of the fee to the following course presentation, or, if in first year, actually retrieve some of the fee.

Table 7.15 - completion by gender for male and female respondents

gender of respondent	total no. of women and men in sample	completed	formally withdrew	withdrew without notifying university
female	347	75% (n=259)	15% (n=51)	11% (n=37)
male	388	77% (n=300)	9% (n=36)	13% (n=52)

Although there was no attempt to find out whether the respondents in the qualitative study were on financial assistance (given to students on various levels of state benefit), two stated that this was the case. These were E (male), who formally withdrew and J (female) who withdrew without notifying the university. This was contrary to the trend indicated in Table 7.15, so it appears that more research would need to be done to draw conclusions about the different behaviour of men and women. The results here were not significant.

Tight (1991) had suggested that women returning to post-school education tended to have lower levels of education, although there were no significant differences between men and women found in the analysis of the study reported here. Tight had also found that women with lower qualifications tended to be in non-advanced further education rather than universities. Woodley et al (1987) had suggested that women who were within the occupational sectors of clerical and sales, small shopkeepers and self-employed workers were more likely than men to be in education at all levels, but fewer women than men in the professional and managerial occupational groups were entering higher education.

From the results found in the analysis here, it can be suggested that at least, in 2002, more women with higher levels of previous education are entering higher education, although they may not necessarily be from the higher occupational levels.

As it had been reported that younger students were more vulnerable to dropout than older learners (Slee 2001), completion rates were crosstabulated against the various age groups.

The data indicated that the highest percentages for completion were in the three groups under the age of 40. These groups also had low rates of formal withdrawals. If the age groups are crosstabulated with previous educational qualifications, 62% of those who completed and were under 40 had A-level or above experience. The largest group with A-levels or above was the 30-39 age range, where 40 % of those who completed had higher level previous qualifications. Only 5% of the under 25s had previous qualifications of A-level or above. Although this was a small group (37 in total), it may indicate that younger students can be expected to have lower previous experience of study and therefore may be less able to demonstrate the skills needed for academic learning. Students over 65 years, of whom two had A-levels or above, would have had to study for these as adults:

A-levels were not available in Northern Ireland 47 years ago. This would also apply to some of the 50-64 age group, of whom 9 had studied for A-level or above. However, both of the older age ranges may have studied for professional qualifications as part of their employment careers, rather than for A-levels. Table 7.16 shows the percentage of each age range who completed, formally withdrew and withdrew without notifying the university.

A summary of these crosstabulations indicated that more men than women complete courses, more students with higher qualifications complete and the younger age groups are more likely to finish their courses. This last finding is not supported by the Open University figures, which have identified the youngest students (under 25 years) as a vulnerable group that is *less* likely to complete (Slee 2001). However, this seems to apply

to students who drop out before the examination stage, as Slee claims that only 44% of those initially registered at the Open University actually sat the examination. Of this 44%, 91% were successful; this is not significantly different from the results of other age groups. As there was no measurement by age of the students in this study who did not respond, it would be difficult to conclude that young students would be more likely to be persistent. However, the data and the literature do indicate that younger students may actually need more support to remain with their studies. Crosstabulating age bands with previous educational qualifications, it was found that 67% of under 25 year olds had A-level or higher qualifications, which is not significantly different from the other age groups. It may be possible that higher previous education will also increase the chances of persistence for the youngest students.

Table 7.16 - age group by completion/non-completion

age of respondent	total numbers in sample for each age group	completed	formally withdrew	withdrew without notifying university
65 and over	10	60% (n=6)	30% (n=3)	10% (n=1)
50-64	83	71% (n=59)	13% (n=13)	16% (n=13)
40-49	202	70% (n=142)	14% (n=28)	16% (n=32)
30-39	297	81% (n=239)	10% (n=29)	9% (n=29)
25-29	101	79% (n=80)	10% (n=10)	11% (n=11)
< 25	37	81% (n=30)	11% (n=4)	8% (n=3)

No attempt was made in this research to place respondents on a social scale, but if it is assumed that students with higher levels of previous education may be more likely to come from a higher social class, then these reported results fit reasonably well with Woodley et al.'s (1987) findings that the typical adult learner is aged between 25 and 40 and middle class. The one exception, and there are small numbers here, is in the age range where younger students completed in larger percentages.

The results of the analysis in this section corroborated, in many cases, the information already collated by the Open University (Slee 2001; Abbott and Ashby 2001). There was no evidence at this stage to show that there would be any differences emerging between the group who had formally withdrawn and the group who had withdrawn without notifying the university, but it was realised that this division of outcomes might be more significant in the chapter including the analysis and discussion of the model factors.

There were higher percentages of first year students completing than was expected from the regional figures. Abbott and Ashby (2001) had reported that in 2000 in Northern Ireland, only 47% of students had successfully completed their course. It must be remembered, however, that the university figures count numbers from the date of the start of the course, which can be misleading, perhaps especially with new students in the context of distance learning. Students at the Open University can have all their fees refunded if they withdraw *before* the start of the course, but administration in both the region and centrally often cannot register these withdrawals until *after* the start of the course. This means that numbers of student registrations can vary considerably depending on when they are taken. The experience of a single tutor tutoring on a first year Social Science course in 2002 shows that she began the year with 21 students which reduced to 11 in the second month. Of these, 10 had actually withdrawn before the course start date (internal report for Staff Tutor, Social Sciences in Northern Ireland). First year students normally receive their first mailings in November and it may be the case that they discover that they have had an unrealistic view of the amount of work required. It also might be that they do not have the study skills required to deal with the volume of materials received. It should also be remembered that figures from Abbott and Ashby (2001) reflect numbers of students who had passed their course, not just those who had persisted and completed.

Students with higher qualifications were more likely to complete their course, although there was no real difference between the groups. There was little difference in withdrawal rates between the groups. However, the analysis showed that more than half of all the respondents had previous educational qualifications of A-level or higher standard. This matches the figures produced for the Northern Ireland region (Abbott and Ashby 2001). Again, this would seem to support Jarvis' (2001) assertion that in the new technologically advanced world of the twenty-first century, even those with good initial qualifications will have to continue to learn throughout their working life

Examining data that crosstabulated gender with completion showed that women were less likely to complete than men, but also that women made up 26% of the total withdrawals while men totalled 22% of total withdrawals. Once more, it seems that women have more difficulty with persistence, which may be due to time and role constraints

The younger age groups (under 40) were more likely to complete than the older students. This may have been because new or improved qualifications were of more importance to younger career-minded individuals, or it may have been that they were not so far removed from their previous experiences of education and could more readily remember and use their learning skills.

Conclusion

The analysis and discussion in this chapter demonstrated that there may well be differences between the characteristics, and needs, of different demographic groups when entering or re-entering higher education.

- Women are likely to be less confident, may have more need to consult with friends and family about their study and greater need for varied support while studying.

- Neither men nor women may have a clear idea in their minds about how they will use their qualifications when they gain these, despite having registered for a specific course or programme.
- Men seem to be more likely to have an instrumental reason for learning that may be connected to progression in their career. Women may be more likely to have less developed ideas about the end point of their studies, but there is no evidence to show that they are less likely than men to want to progress: they can see education as the way to do this.
- Neither men or women may be able to articulate their precise reasons for starting to study. This could be because they do not know what these reasons are, but have been drawn to study through an undefined need to feel they are making progress in their lives.
- Students, even those with previous experience in higher education, may be unsure about their intellectual capability and skills; it may *not* be the case that they will become more certain of success as their study continues.
- Most students can feel that they are behind with their study from an early stage in the course. This may reflect anxiety as well as a genuine need to catch up with the course timetable.
- It is possible that support from other individuals who have studied in higher education themselves will be useful to students, perhaps by passing on their understanding of the skill required to 'play the academic game'.
- Higher previous qualifications will mean that students may be more likely to persist; this might be because they are more likely to have meaningful support, and have learned how to learn, rather than because they have superior intellect.
- Younger students may need extra support at the beginning of their study careers. It is also possible that it would be easier for them to persist in a more traditional institution, where they will be required to attend regularly, which might increase motivation.

Having looked at the broad picture emerging from the analysis of the descriptive data in the first section of the questionnaire and the demographic data for the respondents, the next stage was to combine the variables to form the factors outlined in the model. The method for operationalising the factors has already been described in Chapter 6 (pp.163-165) and the analysis of these composite variables is discussed in the next chapter..

Chapter 8

Results and discussion of the analysis of the model factors

Introduction

This chapter describes the results of the analysis of the model factors and the questionnaire items that provided the information for the variables in the preliminary model. It also relates these results to models of persistence. As in Chapter 7, the discussion of the results is included. The chapter begins with a brief reminder of the outcomes of the research and the production of a prototype model. The chapter continues with the analysis and discussion of individual statements from the Likert scale item which comprised the majority of the independent variables for the model. The next section includes the results and discussion of an analysis of the descriptive statistics of the model variables, which is followed by a section which considers the outcomes of inferential statistical analysis of the model. The outcomes from the analysis are then related to the models of persistence reviewed in Chapter 2 of the study. The chapter concludes with a summary of the results from the analysis of the research undertaken and, based on this, a suggested model incorporating the factors found to be important.

The outcomes of the research

The original aim of this study was to discover why adult part-time learners entered, and remained in, higher education. To achieve this, several steps were taken: -

- Appropriate literature was reviewed to identify factors affecting persistence and dropout in part-time learners. Models of persistence and attrition were also considered.
- A list of 36 factors in the areas of social and environmental factors, traumatic factors and intrinsic factors was identified from the literature.

- The list of factors was used to inform and implement a qualitative study, the results of which reduced the number of essential factors to twelve. These factors were tentatively prioritised and a prototype model produced (Figure 8.1).
- This model was tested by a postal survey of 990 adult learners, of whom 735 responded, and Chapters 7 and 8 report the results and a discussion of these results.
- Conclusions about the strengths and limitations of the model and recommendations for future research are made in Chapter 9.

1st level of importance	support	strong coping strategies	life challenger
2nd level of importance	ability to juggle roles	success in study	love of learning
3rd level of importance	positive early educational experiences	no family/ personal crises	strategic approach to learning
	smooth interaction with institution/ tutors	good physical health	lack of new stressors - eg - work-related/financial

Figure 8.1

A preliminary model of the relative importance of factors affecting persistence

It is important to remember that the statements and items in the questionnaire were intended to reflect the model, which in turn was based on the qualitative analysis. During this stage, as the model was defined as a preliminary prototype, no attempts were made to carry out an analysis of variance or a factor analysis. The aim of the research was to attempt to identify factors that would support student persistence, and it was thought that further qualitative work would be necessary before a full quantitative research study could be undertaken. As it was realised that this study would report the beginning of a much

longer process of research, it was felt to be unnecessary to statistically validate the questionnaire at this stage.

The next section reports the analysis and discussion of the Likert scale statements which made up most of the second part of the questionnaire. The statements are presented in tabular form and the tables contain the frequencies relating to the statements that, together, comprise a specific model factor. Although each statement had five responses, 'strongly agree', 'agree', 'not certain', 'disagree' and 'strongly disagree', the categories were collapsed into three by amalgamating 'strongly agree' and 'agree'; and also 'disagree' and 'strongly disagree'. This section also includes the items which were not part of the Likert scale section, but did contribute to the model factors.

Scale items and model factors from the questionnaire

Model factor - support. This factor was derived from the totals of students who had received support since starting their study from any source or none, so does not have the labelled values given above. Table 8.1 therefore reports frequencies as either 'yes' (for support) or 'no' (for 'didn't tell anyone' which equals 'no support').

Table 8.1 - frequencies and numbers of supported students

questionnaire - section	yes	no
1. Item 2 - support since starting study		
support	96% (n=701)	4% (n=32)

Throughout the study, in the literature and in the qualitative study discussed in Chapter 5, support was the single most important factor for students. Garland (1993) found that students are less able to persist if they have no support. She pointed out that her research included family, friends and work colleagues and any or all of these could make a difference to student persistence.

Support can be of many kinds, but from the literature review and the qualitative study it seemed that if the students perceived that they were supported, this was sufficient to motivate them to continue. In the qualitative study, all of the successful students were supported by partners or spouses and also by their mothers. These students were supported in each case by family members who were all lifelong learners themselves. Family support was important to the interviewees in this part of the study, as three of them did not, or could not, attend tutorials so perhaps missed the support of other students. One of them, however, was in telephone contact with other students on his course. Members of the other groups in the qualitative study had little close support, except for the student who had already graduated and was studying for amusement. His wife had supported him wholeheartedly, although she was not a lifelong learner and had little secondary education. It may be that it is more important for students to be in touch with people, whether family or friends, who are themselves committed to adult learning. It may also be, as Jarvis (2001) has suggested, that economic pressures on employees in the twenty-first century have made it necessary for them to become learners throughout their lives. Certainly A, in the qualitative study, felt that without a degree, he would perhaps not even keep his job as a paramedic and would definitely not receive promotion. He pointed out that: -

"everyone going for a job now needs it - you need a degree to get a job, especially with what's been happening with our job and I've been in there now for 5 years, and everybody coming in has either some degree, whether it's a medical degree or nursing or something like that there and if you go for promotion and you say well I'm a paramedic, so's she, OK and I've got A levels, she's got a degree, she's going to get it....."
(interview with A, student who completed)

If persistence depends upon having support from someone who is also an adult learner, this has implications for the organisation offering the course in terms of both advising students before the course start and providing the sort of support that is necessary to vulnerable students (those who have little useful support). This might be particularly important for the first year student, who can have little conception of the difficulties of juggling roles to make time for study. There was just one student (E) within the qualitative study who had

not told anyone about his studies and he formally withdrew from his course. E's parents were elderly and his father ill and he felt he had to move back home to be there for them, so he withdrew from his course with the firm intention of returning. (He did in fact return in the following year and is making good progress towards a degree). He said: -

E: No - I didn't tell anyone - in case - no they probably would have made fun of me like you know? And me coming straight out of school and straight onto that stuff...

Interviewer: So are you proposing to tell them [family] before graduation?

E: NO - I'd like them all to sleep late you know! I'll ring [on the morning of graduation] and say 'this is where you have to be at this time'!....
(interview with E, who formally withdrew)

Despite E's determination to do the degree on his own (he attended the first two tutorials to meet the tutor and other students, then decided he did not need to go back), it is harder for students without any support to maintain their persistence. Results for those who did not have support for their studies show that just over half of these finished (53%) as against 77% of students with support. This result was significant at $p < 0.05$.

While it can readily be concluded that support is a seminal factor in persistence, it is possible that different types of support may have varying effects. It was demonstrated above (pp.177-179) that women and men varied in the groups from which they received support. Women tended to perceive that they were supported more than men were by parents, friends and siblings. Men, on the other hand, felt they were supported by their spouses/partners and work colleagues more than women did. This might reflect the greater interaction of women with other women in the course of caring for children, or it might reflect the wider patriarchal society where men work in the public arena and therefore value the opinions of their 'peers' (Muncie & Sapsford, 1993).

There was a statistically significant difference between the amount of support received by men and by women (Table 7.5, p.177, $p < 0.05$) in different categories of supporters, so it appears that the gender of the student may affect this factor.

From the literature, the qualitative study and the survey, there could be little doubt that support is indeed seminal for adult learners. There may also be differences between the type and amount of support required by women and men and that is an important outcome of this research.

Model factor - strong coping strategies

The factor of 'strong coping strategies' was constructed from 4 Likert scale statements: -

No. 4 - It isn't necessary to consult with anyone else about my study problems

No.14 - I think if you ignore problems they will often go away

No. 17 - When I have a problem, sometimes I solve it myself, but sometimes I need to ask for help

No. 26 - If I have a problem, I try to think of a lot of possible solutions

Dividing students' abilities to juggle roles from the coping strategies that they used might have seemed an artificial separation, but there were considered to be important reasons for this. Lazarus and Folkman (1984) believed that stress occurs when an individual perceives themselves to be overwhelmed by a combination of events and that there are major differences between individuals' appraisal of a stressful situation. So one student might be happy to juggle roles without feeling particularly stressed, whereas another might be distressed by the efforts required to re-order life to include study periods. Holmes & Rahe (1967) reported that their Social Readjustment Rating Scale consisted of significant life events that required an individual to make changes in life and that some would find this easier than others. The two factors were therefore viewed as different in that good coping strategies covered a response to perceived stress and juggling roles dealt with the mechanisms used by students to make time for their studies.

From Table 8.2 it can be concluded that the respondents felt it was necessary to consult with others about their problems; knew that problems would not go away if ignored; tried

to solve problems themselves, but were willing to ask for help and tried to think of as many possible solutions as they could.

Table 8.2 - frequencies of responses for statements included in model factor 'good coping strategies'

statement no. and description	strongly agree/agree	strongly disagree/disagree	not certain
4 - it isn't necessary to consult...	18% (n=134)	67% (n=486)	15% (n=108)
14 -if you ignore problems...	4% (n=30)	91% (n=663)	5% (n=36)
17 - sometimes I solve a problem myself, but...	90% (n=657)	7% (n=49)	3% (n=21)
26 - if I have problems, I try to think...	79% (n=576)	8% (n=59)	13% (n=91)

It was found from the literature that the ways in which individuals coped with stress had been shown to be important to managing their lives. Lazarus and Folkman (1984) suggested that coping mechanisms depended on the individual's appraisal of threat and that a period of stress stretching over years might be seen as a series of events or one long stressful stage. They identified coping mechanisms as consisting of one of two types of reaction; emotion-focused coping or problem-focused coping: -

"emotion-focused coping consists of strategies such as avoidance, minimisation, distancing, selective attention, positive comparisons and wresting positive value from negative events"
(Lazarus & Folkman 1984, p. 150)

Problem-focused coping, on the other hand, depended on facing and identifying the problem, considering a variety of solutions and making a rational decision on how to proceed. It was clear that there was a difference between general coping styles and a coping strategy adopted to meet a particular stressor. Amirkhan (1990) developed his Coping Strategy Indicator with students in California State university as well as with adults in the community. He discovered that coping strategies could be divided into Avoidance, Seeking Support and Problem Solving and that women were more likely to seek support for their problems. These categories were confirmed by Lovás et al (1997), who also

found differences in the ways that women reacted to stress. So there might be differences in the study in the results for men and women in the factor of coping strategies for their problems.

The qualitative study revealed different types of stress and these were dealt with in different ways. Often students did not identify happenings or situations as stressful, but the way that they reported the effect of the stressors was clear: -

"..in previous years you could take a book - I could go out for the day to a local park - everyone else would run about and play [refers to his two daughters, for whom he cares] and I would sit and read my book. Last year that was completely impossible because you might have to read two pages then it would say 'Now go to the computer and do this' or 'Now go to the tape and listen to this' and it was almost - it seemed to me extremely badly organised - to the point where it actually put you off doing the course..."
(interview with B, student who completed)

B cared for his disabled wife and therefore had the main responsibility for his daughters.

Normally good at managing his time, the 'disorganised' nature of this course conflicted with his need to spend time with his daughters and caused him almost to leave the course.

His coping strategy was avoidance followed by problem-solving, as he just stopped studying and it required the combined efforts of his family to get him back on track.: -

"I was staying with it purely from the point of view of my wife, my mother and my sister-in-law who kept saying it was very silly to quit - and - to - at one level I agree, but at another level, when I opened the book, it was just like a big sigh and a big feeling that I just didn't want to do it..."
(interview with B, successful student)

When persuaded, B adopted a strategic approach to the course and completed the minimum to get a bare pass. H, who had formally withdrawn, claimed to have other current priorities but also said that she suffered a lot from stress. This happened with her study and her social life: -

"There's stress when I actually sit down and I look at the question, I would be stressed out for, it could be, 2 days until I started and once I started then that stress goes away because I know I'm going to finish it..."

"I have his parents [husband's] round to dinner and I would get stressed up no end but there's a point comes whenever I know I have to decide to knuckle down and get it done, and just coming up to that, that stresses me out but once I get over that then the stress is gone and I know I've got to do it"
(interview with H, who formally withdrew)

These examples support the conclusion propounded by Lazarus and Folkman (1984) that individuals do not have rigid coping strategies that apply in every situation, but that their

strategies change from challenge to challenge and may not match their overall coping style. B coped admirably with a disabled wife and two small daughters as well as study by facing and meeting challenges, yet a course that he did not appreciate led him away from his usual coping style.

When the four statements were crosstabulated against gender, it was found that there was a significant difference in only one statement which was No.4 ($p<0.01$). In this case, significantly more males than females strongly agreed or agreed with statement 4 and more females than males strongly disagreed. The figures were: -

	Male	Female
Strongly agree + agree with statement 4	21%	15%
Strongly disagree + disagree with statement 4	65%	69%

Men were significantly more likely to perceive that they could solve their own problems without help than women. From these results it appears that there might be a greater tendency for women to use consultation methods for coping more than men, but there was no other confirmation that women differed in the types of strategies they used to cope.

The inferential techniques, discussed later in this chapter, did not identify 'strong coping strategies' as either a good predictor of persistence or more likely to be associated with persistence. It is unclear exactly why this was, as 76% of students who had strong coping strategies completed as against 11% who formally withdrew and 13% who withdrew without notifying the university (Table 8.23, p. 235). The large central tendency of those who coped well sometimes, shown as frequencies for the factors (Table 8.18, p.228) may indicate that, as Lazarus and Folkman (1994) suggest, it is difficult for individuals to use the same coping strategy in every circumstance. There is a possibility that the statements might not have been sufficiently differentiated from those for the life-challenger and, of

course, the definition for the life-challenger included the ability to cope with stress, so it is possible that the two variables were confounded. Nevertheless it was possible to conclude that having good coping strategies was a definite aid to persistence.

Model factor - the life-challenger

The concept of the life-challenger emerged from the literature spanning educational and health psychology and appeared to provide a rationale for assumptions about particular types of adults who, because of their intrinsic capabilities, outlook on life and willingness to become involved with manipulating challenges (Kobasa 1979, Friedman 1991, Antonovsky 1993), will be inclined towards persistence. The definition of the life-challenger used seven statements from the Likert scale question but, in the operationalisation, it was acknowledged that there were likely to be large numbers of students who were not yet life-challengers but had some of these attributes. In the model factor variable there were 131 life-challengers (19% of students) and 559 who had some of the attributes of the life-challenger (76%).

The seven statements were: -

No. 3 - I like change, it usually means that things are going to get better

No. 8 - I don't believe that I am usually responsible for the things that happen to me in this life

No. 12 - I often think that life makes too many senseless demands on me

No. 15 - My life is going really well and I am managing my studies quite well

No. 20 - I am fortunate because I have all the things I need to make progress in life

No. 23 - I am not sure that I can really influence any of the things that happen to me

No. 27 - I'm not sure that I am committed to any real plans for my future

There were three positive statements; 3, 15 and 20. The rest were negatively presented to encourage students to think about their responses as shown in Table 8.3.

Table 8.3 - frequencies of statements for life-challenger

statement	strongly agree/agree	strongly disagree/disagree	uncertain
like change because things get better...	32% (n=238)	28% n=129)	48% (n=355)
not responsible for what happens...	10% (n=70)	78% (n=575)	10% (n=75)
life make senseless demands...	27% (n=197)	54% (n=400)	17% (n=125)
life is going reasonably well...	63% (n=465)	17% (n=127)	19% (n=137)
very lucky to have what I need...	54% (n=399)	22% (n=163)	22% (n=159)
not sure that I can influence...	11% (n=82)	73% (n=537)	15% (n=107)
not sure that I am committed to future plans...	26% (n=190)	59% (n=434)	14% (n=103)

73% of respondents (537) believed that they could influence what happened to them and 78% (575) that they were responsible for what happened to them in life. More than half of the sample believed that they were committed to future plans and that they were lucky because they had access to the resources necessary to make progress in their lives. They felt that life was meaningful and did not make senseless demands on them. There were, therefore, large numbers who fitted the profile of the life-challenger. The statement supporting the concept of the life-challenger *least* strongly was statement 3. This statement may have been badly phrased, so that readers in today's society where change is endemic and fast may well have had experience of change that was negative. On reflection a more neutral statement might have increased the final numbers of life-challengers.

In the later crosstabulations of the model factors with persistence, 84% of students in the life-challenger group completed, as against 8% who formally withdrew and 8% who withdrew without notifying the university (Table 8.23, p. 235). This result was significant at $p < 0.05$, so there was little doubt that being a life-challenger might be important.

The remainder of the statements supported the thesis of the life-challenger satisfactorily.

Evidence from the qualitative analysis also supported the thesis that there were individual characteristics making up the concept of a life-challenger that would lead to persistence. The students in the successful group were optimistic and self-confident, Kobasa (1979) would have described them as hardy individuals. D had been making major decisions for herself since she was 11 and decided which secondary school to attend: -

"...my choice of secondary school made me different because of the area that we lived in...and because I didn't go to the local, really rough comprehensive, I chose to go to another school, approximately 20 miles away, which was a very good school, I was looked at as the snob and the swot and [I] suppose ostracised in a way, although I was very happy at that school and I'm always glad I made that choice to go to that school at 11..."

"...I don't like starting something and not finishing it ...I'm determined to finish it and it would be just this sense of failing - if I didn't finish it that would be a failure, that would be failing and I don't like to fail.."

"..change doesn't frighten me particularly, I've been through loads of change and, like I said, I, I take the attitude 'well things will work out and there's no point in worrying about things you can't change', if you can change it for the better then get on do something about it, do something if you can think of it, confront and do something and I would - if change has come along - that's what I would generally do...." (interview with D, student who completed)

Life-challengers are not necessarily easy people to deal with. Their very determination can cause problems for others by challenging authority, while at the same time demonstrating a considerable degree of self-confidence and assertiveness. B challenged the teacher at the local technical college where he was doing A levels: -

"I picked a project that the teacher absolutely refused to support - she said that it was impossible, it couldn't be done - it was too difficult...I had been correcting her about a mathematical approach on the blackboard - I'd found it to be incorrect and worked it out for her...so I thought it was best to leave at that point...then I heard about the Open University and I started that and I found it much more suitable then and now." (interview with B, successful student)

B had not benefited from his secondary education because his widowed mother and his uncle pushed him to take A-levels that he didn't want to do; but he was determined to achieve what he wanted which was actually the pursuit of mathematical and technological knowledge and this attribute made him less than popular with family and teachers.

There is also evidence that life-challengers do not necessarily select the right goal initially. Both A and C, who had completed their courses, had chosen the 'wrong' career for them in

the first instance and had had to undergo further years of training to achieve satisfactory careers.

H, who had formally dropped out of her course and had, in fact, withdrawn from study on several occasions, was less sure about her ability to take command of her life: -

"...when it came to big decisions, I do remember they were a headache to me and em, I felt that, although I made them, they were things that I weren't particularly used to doing - making decisions.."

"Yeah - I find it doesn't take a lot to put me off, ...OK I've let myself down for two years, but it's not going to happen again and even I don't have the confidence that I'd finish, I just want to and hope I will.."
(interview with H, who formally withdrew)

J, who withdrew without notifying the university, did not have the ability to organise her life or study on her own: -

"...they told us to set aside two hours every day...you know I found myself sitting there reading for maybe half an hour and saying 'I'll take a wee smoke and a cup of coffee now' which totally wrecks your concentration...somebody would phone me and I would run full gabble for an hour maybe."
(interview with J, who left without notifying the university)

While the concept of the life-challenger may not yet be focused enough for validity, the evidence points towards the importance of a cluster of characteristics that need to be examined and clarified in future research.

Model factor - juggling roles

Following the differentiation between the possession of coping strategies and the process of juggling roles to make time for study, it would be expected that there might be some statistical connection between the two factors. Research has been done into the juggling of roles outside of study, particularly around the roles of women in the late twentieth and the twenty-first centuries (Kirkup and Von Prümmer, 1990; Evans, 1994) but this has concentrated on the existence of the *need* for women to juggle roles, rather than on how they actually achieve this. There is little work that connects coping strategies with the ability to juggle roles, but the quantitative results here showed that 75% of those who could juggle roles effectively, completed their course (Table 8.23, p. 235). As with the factor of 'coping strategies', 'juggling roles' was not significant in either the discriminant analysis

nor the logistic regression, nor did it achieve significance when crosstabulated with the dependent variable. There were four statements in this factor: -

No. 2 - I don't need to cut any of my leisure activities to make time for my study

No. 9 - I've asked my family/friends to take over some of my chores when I am studying

No. 21 - It can be hard to find time to study - I have to study at odd times and sometimes only for short periods

No. 24 - I like to study when nobody is around - sometimes this means very early or late in the day.

Table 8.4 - frequencies of statements for juggling roles

statement	strongly agree/agree	strongly disagree/disagree	uncertain
haven't need to cut activities	21% (n=154)	70% (n=524)	7% (n=49)
family/friends to take over some chores	26% (n=189)	71% (n=511)	3% (n=22)
hard to find time to study	80% (n=582)	16% (n=120)	4% (n=27)
have to study early or late	78% (n=568)	17% (n=121)	5% (n=34)

The result, shown in Table 8.4, for Statement 9 was unexpected, particularly in view of the support apparently given to students by family and/or friends. It was thought that this statement, included in the composite variable on 'juggling roles' would produce a majority result for 'agree/strongly agree'. This result would not have surprised Clouder (1997) who suggested that women failed to re-negotiate their roles with their families when they began to study and Blaxter & Tight said that the most common methods of coping with role stress were by withdrawing, giving up other activities or combining roles by studying on the way to work, or at lunchtimes (Blaxter & Tight 1994). Both of these researchers concluded that the strain of juggling roles was greater for women and this conclusion was supported by Morgan (1991) and Kirkup & von Prümmer (1990).

To test the differences between men and women, Statement 9 was crosstabulated against gender in Table 8.5: -

Table 8.5 - crosstabulation of Statement 9 with gender

gender of respondent	strongly agree/agree	uncertain	strongly disagree/disagree
male	20% (n=75)	3% (n=10)	77% (n=295)
female	33% (n=112)	4% (n=12)	64% (n=216)

The difference between men and women in this Table is statistically significant ($p < 0.01$), although not in the direction that was assumed from the literature. Women were much more willing to ask for some of their responsibilities to be taken over by their family and/or friends than were men. It was, of course, always possible that amongst the reasons for this might be that women have by far the most time-consuming and repetitive workloads from day to day, still having responsibility for childcare or caring for elderly relatives (Kirkup & von Prümmer, 1990). If this was the case, then the somewhat larger percentages of women should perhaps have been very much larger. It could also be that men, in the main, have fewer regular chores to perform, therefore they did not need any help to provide them with study time (Wetherell 1999). In this case, one in five of the men was acting rather selfishly in seeking practical help. The alternative explanation may be that men seek less practical help than women do when faced with extra demands on their time. Whichever explanation is correct, there do seem to be relatively few men or women seeking help with everyday tasks that, if given, would free up more time for study.

Model factor - Success in study

Success in study was based on Item 4 in the first section of the questionnaire, which was discussed in Chapter 7, (pp. 183-185). This model factor was initially constructed in the same way as 'support', with two alternatives; the students felt they were either successful or they were not. If they perceived that they were successful, they had selected three options within the item: -

- 'feel you are succeeding'
- 'feel you are in control of your learning'
- 'think your grades are reasonably good'

Table 8.6 - frequencies of students and perception of success

questionnaire item 4	yes	no
feel you are succeeding	42% (n=305)	58% (n=428)
in control	23% (n=167)	77% (n=566)
reasonably good grades	41% (n=302)	59% (n=432)

Table 8.6 shows that the factor of success in study may have been adversely affected by the option 'in control', which was chosen by less than one quarter of the respondents.

Students were unwilling, at this stage of the course, to commit themselves to admitting that they were in control of their learning. The discussion in Chapter 7 concluded that it might indeed have been too early in the course for students to perceive that they were successful and this was supported by the results of the crosstabulations of perception of success and year of study (Table 7.9, p. 183). This showed a significant difference between feelings of success of students in first year and those in subsequent years: the more experienced the student, the more willing they were to perceive themselves as successful.

Model factor - love of learning

This factor was based on Item 3 in the first section of the questionnaire and was constructed in the same way as items 1, 2 and 4. The model variable used three options: -
'you enjoy study'
'it will keep your brain active'
'you really like the course'

Table 8.7 - frequencies of students' choice of options in love of learning factor

love of learning factor	yes	no
enjoy study	38% (n=275)	63% (n=459)
keep brain active	58% (n=422)	42% (n=312)
really like course	33% (n=245)	67% (n=489)

The frequencies for the three items making up the factor are shown in Table 8.7. A majority of students opted for 'keep brain active', although even larger majorities did not indicate that they were studying because they liked their course or enjoyed study. One explanation for this may have been that the students had not studied for a long enough period to be able to say they were enjoying their studies; most of their energies may have been used in keeping up with the required reading.

Model factor - positive early educational experiences

This factor was compiled from Item 5 in the first part of the questionnaire and was discussed in Chapter 7, pp 186-188. The two options of primary and secondary school experiences together made up the factor. Table 8.8 shows the result of amalgamating the two levels of schooling.

Table 8.8 - frequencies of early educational experiences

early educational experiences - both primary and secondary schools	happy most of the time	unhappy most of the time
percentages and numbers	43% (n=314)	57% (n=418)

Table 8.8 clearly shows that, unlike the separate results for primary and secondary schools reported in Chapter 7, an amalgamation of the two levels of schooling results in almost six out of ten students having been unhappy most of the time at some stage in their school career.

Model factor - strategic approach to learning

This factor was made up of six of the Likert scale items in the second section of the questionnaire, item 6, and was intended to identify students who were able to study both efficiently and effectively. The frequencies are reported in Table 8.9.

No. 5 - I'm becoming better at knowing what to read and what not to bother with

No. 13 - I read as much as it takes to get good assignment grades

No. 16 - It's hard to make connections between one topic and the next in my course

No. 18 - The first things I look for when I start a new unit or book are the aims or outcomes and the TMA requirements

- No.25 - To be successful, you have to learn most of the material in the course books
- No.28 - It's important to find out what the tutor wants and give it to her/him

Statements 5, 13, 18 and 28 are statements that indicate the strategic learner (Entwistle 1996), disagreement with statement 16 applies to the reflective or deep learner (Entwistle 1996, Jarvis 1998) and agreement with statement 25 reveals the surface approach or the non-reflective learner (Entwistle 1996, Jarvis 1998).

Table 8.9 - frequencies of statements for strategic learning factor

statement no.	strongly agree/agree	strongly disagree/disagree	not certain
5	63% (n=466)	12% (n=85)	24% (n=179)
13	60% (n=443)	29% (n=212)	10% (n=74)
16	12% (n=88)	76% (n=557)	11% (n=79)
18	73% (n=536)	20% (n=149)	6% (n=44)
25	56% (n=413)	28% (n=205)	15% (n=112)
28	57% (n=421)	18% (n=135)	23% (n=169)

Although most of the statements give a majority of students learning strategically or reflectively, the response to statement 25 indicates that not all students are capable of this. Methods of learning will change over time, as Beaty and Morgan (1992) found in a study of adult learners over a six year period. They acknowledged that, although learning strategies developed in sophistication and usefulness over the years, some learners never reached the highest or 'graduate' level of learning. They also claimed that students said they had developed not only in learning ability, but in other areas as well, so there was a transfer of learning skills to the rest of their lives. To test these theories, Statement 25 was crosstabulated against year of study, age group and gender. The results of measuring the statement against gender produced no significant results and, in fact, men and women scored almost identical percentages in each response option. However, crosstabulations

with age and year of study both produced significant results, indicating that younger students and those in their first year of study scored higher on rote learning methods.

Table 8.10 - crosstabulation of Statement 25 with year of study

year of study	1 st year students	2 nd /3 rd year students	4 th year or above
agree/strongly agree	62% (n=86)	60% (n=191)	51% (n=136)

Table 8.11 - crosstabulation of statement 25 with age group

age group	65 and over	50-64	40-49	30-39	25-29	<25
agree/strongly agree	50% (n=5)	60% (n=50)	53% (n=107)	56% (n=164)	58% (n=59)	76% (n=28)

The results in Tables 8.10 and 8.11 seemed to indicate that it is important not only to introduce new students, especially those who are young, to study skills, but to structure a programme of 'learning to learn' which helps adult learners to become independent learners. Asking students to solve problems and reflect on their learning is useful, but for those who are used to being directed on how and what to learn, it is also difficult. Learning institutions may not make a difference between the ways in which children and adults learn and thus fail to inculcate useful learning skills. Gibbs (1980) felt that learners should be encouraged to understand rather than remember and Entwistle's definition of comprehension included relating new material to previously learned information (Entwistle 1996). Why the student is learning may also be important. Those who are studying purely to gain qualifications may not be inclined to reflect and link new learning to old. Certainly A, one of the students who was interviewed in the qualitative study expressed succinctly the approach to surface learning that he had used during his first year of study. This contrasted with his next course, in which he was completely immersed and using a deep approach.

"every one going for a job now needs it - you need a degree to get a job, especially with what's been happening with our job...if you've got a degree or a higher qualification they're going to give you [promotion] so you can't scream about discrimination"

"Financially it's, I'm sort of picking courses which are 2 and 3 hundred pounds purely because, you know, we're trying to get the house done up...I just don't have money for the expensive ones...last year I did statistics...but the more I looked into it, I found statistics was intensely boring...didn't really care if I understood it, it was a 'monkey see, monkey do' attitude - I did it to get 30 points... This year, with enjoying it and actually getting into it [a biology course], I'm digging myself into a hole, going and getting large textbooks, getting people at work and all, going to the doctors and saying 'I can't understand how you do all this - would somebody explain them to me...' "
(interview with A, who completed)

Model factor - smooth interaction with tutors and institutions

Initially this factor was coded as two separate variables - the first measured interaction with the tutor and the second with the institution. For the final analysis they were amalgamated, as it was concluded that, from the student's point of view, the tutor *was* part of the institution. However, it was useful to look at the tutor's role separately, as this can be considered as a part of the on-going support perceived to be important by the student.

Statements which were part of the interaction with the tutor were: -

No. 1 - My tutor(s) feedback is usually very useful and I can learn from it

No. 7 - My tutor gives helpful tutorials

No. 11 - I consider my tutor to be my main support in my studies

No. 22 - I like to contact my tutor at the start of the course so that I can get to know her/him and what might be expected of me

Table 8.12 - statements describing interaction with tutors

statements	strongly agree/agree	strongly disagree/disagree	not certain
feedback useful...	82% (n=601)	3% (n=22)	12% (n=90)
helpful tutorials...	60% (n=439)	6% (n=45)	27% (n=200)
tutor main support...	66% (n=482)	22% (n=159)	12% (n=87)
contact tutor early...	40% (n=293)	38% (n=279)	20% (n=149)

Table 8.12 clearly shows the value placed on the tutor's role by students. There is a special emphasis on the usefulness of feedback to the student on their progress and this was neatly summarised by a respondent who commented 'it is a big confidence-booster' (student 106). Although feedback may be particularly important to distance learning students, Entwistle (1996) suggests that part of a strategic approach to learning involves

'gearing work to the perceived preferences of lecturers' (p.102) so there is evidence that adult learners generally value feedback and use this to improve learning and thus their confidence.

Of the 200 who were uncertain about the usefulness of tutorials, manual checks revealed that 117 were either unable to attend tutorials or had not been offered a tutorial by the time they had completed the questionnaire. A relatively small percentage (40%) thought that they should contact their tutor at the start of a course. One comment was 'I don't like to bother them' which was made by several students. This indicates that it may be useful for lecturers and tutors of adult learners either to provide individual sessions with new students at the first course meeting; or, if there are distance learning students, to use telephone calls to make contact at the start of the course.

Crosstabulations of the statements against gender, year of study and previous educational qualifications produced no significant statistical differences between groups.

Statements that related to interaction with the institution were: -

No. 6 - Advice from the regional office isn't particularly useful in helping me make decisions about my courses

No. 10 - I'm not really sure who to contact if I have a practical problem with my studies

No. 19 - I am uncertain about choosing and registering for the next course

Table 8.13 - statements describing interaction with institution

statements	strongly agree/agree	strongly disagree/disagree	not certain
advice from regional office not useful...	22% (n=159)	38% (n=281)	38% (n=281)
not sure who to contact...	15% (n=110)	75% (n=553)	9% (n=66)
uncertain about choosing...	36% (n=262)	50% (n=365)	13% (n=93)

The statements in Table 8.13 were all phrased negatively because it seemed to be important for students to have to think about their responses carefully. Kember suggests

that administrative support systems are important in helping the student to feel part of the institution. He says: -

"An efficient service with speedy attention to queries creates the impression that the student is dealing with a responsive professional organization. Unfortunately, it only takes one or two foul-ups to destroy a good impression created over a period of time."
(Kember, 1995, p.189)

There was a significant difference between the results for men and women when gender was crosstabulated against Statement 6 ($p<0.01$). Women were more likely to strongly disagree or disagree with the statement; although the major difference was in the 'not certain' category where 61% of men were unsure about the usefulness of advice from the regional office about their course, as opposed to 40% of the women. The explanation for this might be that men were less likely to contact the office, so were not able to say whether the advice was useful or not. This thesis was supported by the figure of 46% of women who strongly disagreed or disagreed with the statement as against 33% of the men.. If, as was concluded in Chapter 7, women looked for support from a variety of sources, contacting the administrative system might be an extension of this. There was also a significant difference between the students in the various years of study for this statement. As might be expected, more of the most experienced students strongly agreed or agreed with the statement; they were unlikely to need the administrative services as much as did the new students. New students relied more heavily on the regional office than either of the other groups. Table 8.14 shows the results of the crosstabulation of year of study with statement 9.

Table 8.14 - year of study crosstabulated with statement 9

year of study	1st year	2 nd or 3 rd year	4 th year and above
strongly agree/agree	12% (n=17)	20% (n=64)	30% (n=78)
strongly disagree/disagree	36% (n=50)	39% (n=125)	40% (n=1-5)
not certain	25% (n=71)	46% (n=128)	29% (n=80)

Not unnaturally, there was a similar result when year of study was crosstabulated with Statement 19, which was about choosing the next course. Here the significance was

$p < 0.05$ and the difference was between the 4th and subsequent years and the other two groups. While it might be supposed that someone who was probably at least two-thirds of the way through a degree would know which course they wanted and needed to do in the future; it was somewhat surprising to find that students who might have finished half of their degree were no more sure of their choices than new students. So it must be accepted that students are not always committed to a particular career or degree structure, even when they have completed a measurable part of the programme. It may be easier for Open University students to be flexible, as they can put together their own degree structure, but it would be interesting to find out whether this result also applied to adult learners in more traditional higher education programmes.

Model factor - lack of new stressors

This factor and the final two factors of good physical health and no family or personal crises were dependent upon a snapshot of the students' perceptions taken at the time at which they completed the questionnaire and what they would do if faced with these problems. The factors do not forecast what would happen if illness or crises occurred during the course and indeed showed that students, particularly if faced with family illness, were unwilling to make a decision for or against persistence. Students who felt they had no new stressors were expected to feel that life was going well for them, and this variable depended upon a single statement: -

No. 15 - My life is going reasonably well and I am managing my studies quite well.

The results showed that 64% (n=465) of students strongly agreed or agreed with the statement and 36% (n=264) strongly disagreed or disagreed with it. There were no statistical differences found in gender or year of study, but when crosstabulating the statement with previous educational qualifications, there was a difference significant at $p < 0.05$. As expected, the higher the level of previous study, the more likely was the response to be in agreement with the statement. Table 8.15 shows this result, which is

supported in research from Lea (19960) who concluded that new students had more difficulty than experienced learners with the academic material. Grace quoted Northedge as describing the first year of study as 'a culture shock' (Grace 1996, p. 14). Students with previous academic experience should not have to make such a difficult transition to dealing with academic writing.

Table 8.15 - crosstabulation of statement 15 with previous educational qualification

previous educational qualifications	strongly agree/agree	strongly disagree/disagree
A-level or above	70% (n=320)	33% (n=158)
O- level or equivalent	59% (n=125)	41% (n=87)
no previous qualifications	50% (n=16)	50% (n=16)

Model factor - good physical health

This factor used the final question in the questionnaire, which was: -

If you were ill, would you: -

try to continue studying?
stop studying immediately to get better?
leave the course hoping to return next year?

This question was separated from the Likert scale statements, as it was considered to be important, not only to collect students' opinions of how they would cope with illness, but also to distance the item from the Likert scale where they would be able to choose a central position. This question also formed part of the final factor of 'no new crises'.

Table 8.16 - frequencies of choices in factor 'good physical health'

good physical health	try to continue	stop studying	leave hoping to return
frequencies of options selected	84% (n=618)	9% (n=67)	5% (n=34)

The results in Table 8.16 were unequivocal; the vast majority of students were optimistic enough to try to continue with their study, even if ill. The question did not differentiate between serious and minor illness, so it must be supposed that respondents assumed that

illness would be minor and that they could cope with it. Crosstabulating the item with year of study gave a significant result ($p<0.01$), which indicated that, once more, experience of study was helpful. 91% of 4th year or above students said they would try to stay, as did 85% of 2nd or 3rd students and 78% of first year students. The direction of results was reversed for the two other options, with 2% of the most experienced students deciding they would leave the course to return in the following year, while 9% of first years would consider this step. There were no other differences found between groups for gender, previous educational qualifications or age.

Model factor - no family or personal crises

This final factor used statements 29 and 30 as well as the question discussed in 'good physical health': -

no. 29 - If one of my family was ill for a time I'd probably want to leave the course

no. 30 - If I had any sort of crisis at work or at home, I'd still try to finish my course

Frequencies of these two statements (Table 8.17), which seemed, on the face of it, to describe similar situations, had very different results.

Table 8.17 - frequencies for statements 29 and 30

statement	strongly agree/agree	strongly disagree/disagree	not certain
family ill, so would leave..	32% (n=233)	33% (n=239)	35% (n=253)
crisis - would try to finish	76% (n=552)	8% (n=56)	16% (n=119)

Comparing the results of statement 29, where the results were split roughly into thirds, with the model factor of health question (Table 8.16), which referred to the student's *own* health, showed that 84% of respondents would try to continue if they themselves were ill. The results for statement 30 indicated that despite a crisis, the overwhelming majority would try to finish. It may be assumed that for statement 30, respondents were considering crises other than illness, as they had just answered a question on this. So it

appears that students would attempt to continue if they were ill, or if they had a non illness-related crisis, but not if a family member became sick. There were no significant gender differences for either statement 29 or 30; in fact, the numbers were almost identical for both men and women. Nor were there any statistically significant differences for year of study, previous educational qualifications or age group.

The results may have been due to an optimistic outlook on the part of the respondents about their own health and ability to deal with crises, but they may have been less confident about the needs of other family members. Certainly, the qualitative study, reported in Chapter 5, included several students who had experienced illness, either their own or that of close family and in all cases, they had stopped studying.

" Yes, he [father] was ill and my Mum's not too well either and so there was nobody else to look after him so...he was calling me all the time, so he was turning night into day - and it was - it was just about the time for the residential school and he did end up getting sick again, so I had to stay..."
(Interview with E, who formally withdrew)

".for my degree I had to do that [withdraw] once, whenever my youngest child was born, she was actually very ill for the first year, it was the first time we ever had a child ill like that, and I had signed up and everything and I felt I was going to be able to cope because of how I had done before, but she was in hospital at birth and everything and I couldn't go on - I did withdraw from it"
(Interview with L who left without notifying the university)

"Last year, yes, I was ill about two years back and it was very difficult to study, in fact, I was off work for about 6 months and it caused me immeasurable problems...I was feeling very poorly and it's a sad thing in a way because I'd actually, I think I'd completed the three TMAs and I just had to opt out of the exam at the last because I thought I wasn't just up to scratch in, my studies for the examination."
(Interview with K, who left without notifying the university)

H had also withdrawn because of illness. These four students had all returned to study as soon as possible, so perhaps the most likely outcome of illness or crises is, in fact, withdrawal and then return at a later date. If withdrawal is caused by illness or crisis, the institution will almost certainly be told of this by the student, who may need support and encouragement to return after an enforced absence.

Summary of results from the individual statements

The results from an examination of the individual items and statements in the questionnaire identified more information about students, some of which corroborated the evidence from chapter 7, and some of which added new information.

- Support emerged as the largest factor for students at all levels, both male and female. Support from close family or friends seemed to be particularly useful and it may be useful if supporters are themselves interested in learning or have studied as adults.
- Women may be more likely to look for support from a wider range of people and this may include tutors and administrators from the learning institution.
- Coping strategies were important to all students, although men were slightly more likely to think that they were able to solve their own problems than women were. Again, women appeared to need a wider network of support. Well-developed coping strategies might be upset by extra stress.
- Students did not particularly like change - they did not see it as necessarily positive, although they did think that they were in control of their lives and could influence what happened to them.
- Only about one-quarter of students asked for help with their roles or tasks when studying; one-third of women and one-fifth of men.
- Students may have difficulty in learning to study strategically. Learning to learn is an important skill for new students, but also needs to be reinforced throughout their study. Many are still engaged in rote rather than reflective learning.
- Students depend upon their tutors and value their support and feedback. Many higher education institutions require minimal feedback on coursework as it is assumed that students will speak to tutors about their results. However, students may not wish to approach tutors to explain poor results and this may affect persistence.
- Interaction with the learning institution needs to be considered as part of the student experience and structured accordingly. Indifferent or unaware administrative staff can make a difference to students' confidence.

- Students tend towards over-optimism about their ability to keep studying if there is illness or any other crisis in the family. The majority consider that they will be able to manage if they themselves are ill, but they are less certain of their reaction to the illness of another family member.

This section has dealt with an examination of the individual statements and items that make up the model factors; it is followed by the results and discussion of the independent variables in the model..

The model factors and persistence

Before beginning this section, it is important to reiterate that the factors in the model did not relate to fixed characteristics of students, but rather to intrinsic abilities and external pressures which indicated that students might persist at one time, but might be less likely to do so at another. So, for example, a student who had good coping strategies might have found that she did not do well in an assignment, or one of her family might have been ill or become unemployed. Thus some apparently less important factors might have combined to overcome what would normally be a well-organised student who can handle problems with relative ease. So prioritising the factors into three levels, as has been done in the model, was a reflection of the factors that, individually, were thought to be more important to the students, rather than any final formula. The intention of the data analysis was to identify aspects of this prototype model that may be important and useful; and also those that may not be as important as earlier thought.. Table 8.18 shows percentages and numbers for the students who scored positively on each factor.

As was suspected from the earlier analysis of the individual statements, frequencies of some factors had a high 'central tendency' score. There were 80% of students who had some of the attributes of the life-challenger, 41% who sometimes used efficient coping skills and 70% who managed to juggle roles successfully for some of the time. 89% of students studied strategically for at least some of the time. A large central tendency, taken

together with the results from the disaggregate items, may well point to difficulties in the constructions of the model factors.

Table 8.18 – frequencies of the independent variables in the model

Level 1	% students with factor	n=	Comments on result
has support with studies	96%	701	by far the most important factor by frequency
uses efficient coping strategies all the time	59%	423	the remaining 41% sometimes used efficient strategies
is a life-challenger now	18%	131	a further 80% scored enough to show they had some of the attributes of the life-challenger
can juggle roles successfully	28%	197	70% have some success at juggling roles (n=495)
perceives that they are successful in study	9%	68	49% perceive themselves as partly successful (n=358)
claim to love learning	13%	95	62% ‘central’ (n=458)
had positive early educational experiences	43%	314	counting primary and secondary experiences together
interacted well with tutor and institution	48%	347	many students (42%) had not attended a tutorial at this stage
good health/would try to stay if ill	86%	618	optimistic for many students
studied strategically	11%	81	89% did so sometimes (n=634)
had no new stresses	64%	465	felt life was going well
would try to stay if there was a family or personal crisis	36%	260	56% said it depended on the crisis (n=407)

The lowest score was for the factor of the students' perception that they were successful. As suggested in Chapter 7, this may have been due to the timing of the survey. The highest result was of students perceiving that they were receiving support.

Crosstabulations of the model factors with the demographic data were completed as a means of identifying possible differences between groups with varying characteristics. This series of crosstabulations reports numbers and percentages of students in the four demographic categories who scored positively on each of the model factors. So, for example, Table 8.19 looks at crosstabulations of gender with model factors and Table 8.20 at crosstabulations of students' previous educational qualifications with the model factors.

In Table 8.19 data indicates that women scored the same or higher than men did on all but two of the factors. These were 'perceiving that they were successful in study' and 'having no new stresses', where men scored higher.

There were statistically significant differences between men and women on the factors of 'having support', 'using efficient coping strategies', 'juggling roles' and 'perceiving that they are successful in study' ($p < 0.01$). Women had higher scores in support, coping skills and juggling roles, while more men perceived that they were successful in study.

Table 8.19 - crosstabulation of gender with model factors

factor	positive responses	female (347 students)	male (388 students)
has support with studies	701	98% (n=339)	94% (n=362)
uses efficient coping strategies all the time	423	65% (n=219)	54% (n=204)
is a life-challenger now	131	20% (n=65)	18% (n=66)
can juggle roles successfully	197	33% (n=110)	23% (n=87)
perceives that they are successful in study	68	6% (n=22)	12% (n=46)
claim to love learning	95	13% (n=44)	13% (n=51)
had positive early educational experiences	314	45% (n=154)	41% (n=160)
interacted well with tutor and institution	347	50% (n=172)	46% (n=175)
good health/would try to stay if ill	618	86% (n=291)	86% (n=327)
studied strategically	81	11% (n=38)	11% (n=43)
had no new stresses	466	62% (n=213)	65% (n=252)
would try to stay if family or personal crisis	247	35% (n=122)	32% (n=125)

It was not surprising to find that women are more used to coping and juggling roles as this is supported by research carried out by Kirkup and von Prümmer (1990), Heron (1997), Lunneborg (1994) and Lentell (1998) where it was concluded that women are less confident than men, have to make greater efforts to juggle roles and feel less confident about approaching academic work. That women had more support and interacted better with the institution was also expected as the conclusions in chapter 7 had indicated that women were more likely to seek wider support than men did from family and friends. It seems as if they are also more willing to seek support from their tutors and the learning

organisation. The conclusion arrived at in Chapter 7 which suggested that women are less confident than men may also have been influenced by the result that more men perceived that they were successful in study than did women.

Crosstabulating the model factors with the year of study produced three significant results ($p<0.01$). These were for the factors of 'life-challenger', 'interaction with the institution' and 'good health/would try to stay if ill'.

Table 8.20 shows that in the last two of these factors the students in 4th year and above scored highest, with 91% of these students hoping to keep studying if they were ill, as against 78% of first year students and 85% of 2nd and 3rd year students. 56% of 4th year and above students interacted well with the institution, while 46% of first year students and only 43% of 2nd and 3rd year students thought they interacted well with the university.

Table 8.20 - crosstabulations of year of study with model factors

factor	positive responses	1 st year (140 students)	2 nd or 3 rd year (323 students)	4 th year or above (267 students)
has support with studies	698	94% (n=131)	97% (n=312)	96% (n=255)
uses efficient coping strategies all the time	422	62% (n=86)	60% (n=190)	56% (n=146)
is a life-challenger now	131	21% (n=29)	19% (n=58)	18% (n=44)
can juggle roles successfully	197	29% (n=39)	24% (n=76)	32% (n=82)
perceives that they are successful in study	68	7% (n=10)	11% (n=34)	9% (n=24)
claim to love learning	94	10% (n=14)	12% (n=84)	15% (n=40)
had positive early educational experiences	312	40% (n=56)	44% (n=143)	43% (n=113)
interacted well with tutor and institution	347	46% (n=64)	43% (n=136)	56% (n=147)
good health/would try to stay if ill	618	78% (n=109)	85% (n=272)	91% (n=237)
studied strategically	81	13% (n=18)	9% (n=29)	13% (n=34)
had no new stresses	463	62% (n=87)	64% (n=204)	65% (n=172)
would try to stay if family or personal crisis	247	31% (n=44)	31% (n=101)	38% (n=102)

It may be assumed that, for these two factors at least, those with most experience made better use of the university resources and were more determined to continue even if ill. Although the third factor of 'life-challenger' shows a reverse result, with first years scoring higher than all other students, the raw numbers indicate that two-thirds of the total number

of life-challengers were at 2nd year and beyond, perhaps demonstrating that care needs to be taken in the interpretation of these sets of statistics where total numbers within groups are not similar.

Table 8.21 gives the results of the crosstabulations of the model factors with the previous highest level of educational qualifications. It indicates that, for example, 96% of students who had A-levels or above had support with their studies, as also did 96% of students who had O-level or equivalent and 97% of students who had no previous qualifications had support with their studies. While there was only one result that was statistically significant at $p<0.01$, and this was the factor of having no new stresses, the numbers and percentages for other factors do indicate that perhaps the most highly qualified students have certain advantages, especially over those who have no previous qualifications. Students with the highest levels of previous qualifications are more likely to be life-challengers, perceive that they are successful in study, like learning and have studied strategically.

Table 8.21 - crosstabulations of highest levels of qualifications prior to OU study, within each level, for each model factor

factor	positive responses	A-level or above (479 students)	O-level or equivalent (215 students)	no previous qualifications (32 students)
has support with studies	694	96% (n=458)	96% (n=205)	97% (n=31)
uses efficient coping strategies all the time	419	28% (n=277)	29% (n=128)	22% (n=14)
is a life-challenger now	130	21% (n=95)	17% (n=34)	3% (n=1)
can juggle roles successfully	197	28% (n=130)	29% (n=60)	22% (n=7)
perceives that they are successful in study	67	10% (n=46)	9% (n=19)	6% (n=2)
claim to love learning	92	15% (n=70)	9% (n=19)	9% (n=3)
had positive early educational experiences	312	44% (n=209)	41% (n=88)	47% (n=15)
interacted well with tutor and institution	343	47% (n=225)	49% (n=103)	47% (n=15)
good health/would try to stay if ill	616	85% (n=403)	87% (n=184)	91% (n=29)
studied strategically	79	12% (n=57)	10% (n=20)	7% (n=2)
had no new stresses	461	67% (n=320)	59% (n=125)	50% (n=16)
would try to stay if family or personal crisis	246	33% (n=160)	33% (n=71)	47% (n=15)

Crosstabulating the age groups with the model factors indicated that there were differences between the groups on some of the factor scores. However, some of the cell counts were very low, especially for the oldest and youngest age groups: with the exception of the factor 'claims to love learning', over half of the respondents were within the two age groups 30-39 years and 40-49 years, which is what would be expected from the literature (Woodley et al. 1987).

Table 8.22 presents the results of the crosstabulation for the factors within each of the age groups, for example, 30% of the 65 and over age group used efficient coping strategies, as did 55% of the 50-64 age group, 59% of the 40-49 age group et cetera.

The crosstabulations indicated that the youngest group of students scored highest on the factors of 'good health/ would try to stay if ill', having 'no new stresses' and 'would try to stay if there was a family or personal crisis'. As students under 25 are probably less likely to have family responsibilities and would tend not to consider the possibility of serious ill-health, these results would be expected. However, this group also scored highest on being a life-challenger and studying strategically. In both these factors, the overall age group numbers were very small, making this result questionable. It is unlikely (though not impossible) that such young students would have achieved life-challenger status. Friedman (1991) and Antonovsky (1993) believed that becoming a life-challenger was part of the process of growing maturity and individuals were less likely to achieve this status until they were in their late twenties or early thirties. This result is therefore more likely to be a function of the small group numbers.

The youngest age group scored lowest on the ability to juggle roles, again, possibly a measure of their youth and lack of responsibility for home and family. They also scored poorly on early educational experience, which may have reflected school experiences that were relatively recent and less than happy.

Older students, those in the categories 50-64 and 65+, scored higher on factors such as 'loves learning', perhaps indicating a reason reasons for study, whereas the lowest scores for this factor was within the 30-39 age group. It might be assumed that at this younger age, students may be more motivated by the opportunities for career advancement. So a love of learning may have seemed less relevant to this age group.

Table 8.22 - Crosstabulations of model factors within each age group

factor	positive responses	65 and over (n=10)	50-64 (n=83)	40-49 (n=202)	30-39 (n=297)	25-29 (n=101)	under 25 (n=37)
has support with studies	698	90% (n=9)	93% (n=77)	93% (n=187)	98% (n=289)	99% (n=100)	97% (n=36)
uses efficient coping strategies all the time	422	30% (n=3)	55% (n=42)	59% (n=118)	62% (n=181)	59% (n=59)	51% (n=19)
is a life-challenger now	131	11% (n=1)	21% (n=15)	14% (n=27)	20% (n=55)	21% (n=21)	34% (n=12)
can juggle roles successfully	197	22% (n=2)	19% (n=14)	27% (n=53)	31% (n=89)	32% (n=32)	19% (n=7)
perceives they are successful in study	68	10% (n=1)	13% (n=11)	5% (n=10)	9% (n=27)	12% (n=12)	19% (n=7)
loves learning	94	20% (n=2)	34% (n=28)	13% (n=26)	7% (n=22)	12% (n=12)	11% (n=4)
positive early educational experiences	312	40% (n=4)	35% (n=29)	49% (n=98)	38% (n=113)	55% (n=56)	32% (n=12)
interacted well with tutor and institution	444	60% (n=6)	64% (n=51)	50% (n=101)	47% (n=137)	41% (n=41)	30% (n=11)
good health/would try to stay if ill	618	70% (n=7)	85% (n=69)	85% (n=169)	86% (n=251)	89% (n=89)	89% (n=33)
studied strategically	81	nil	8% (n=6)	11% (n=22)	13% (n=39)	9% (n=9)	14% (n=5)
had no new stresses	463	70% (n=7)	69% (n=55)	57% (n=114)	65% (n=194)	62% (n=63)	81% (n=30)
would try to stay if family or personal crisis	247	30% (n=3)	35% (n=29)	31% (n=62)	34% (n=100)	38% (n=38)	41% (n=15)

In conclusion, this short section of analysis indicated that: -

- Women are more likely to have support, use efficient coping skills and juggle roles better than men.
- The most experienced students are more likely to think that they would persist, even if ill and also to interact effectively with the university.

- Students with higher previous qualifications are more likely to be life-challengers, and their educational experience may have given them more effective study strategies.
- Older students may have more affective reasons for study, such as enjoying learning than younger students, who may have instrumental reasons, such as wanting a job or promotion or a change in career.

The model and persistence

The next stage of the analysis in this section was to measure the model factors against the dependent variable of persistence as measured by completion of the course. The dependent variable was initially divided into three groups, those who completed, those who formally withdrew and those who withdrew without notifying the university. The qualitative study had indicated that students who had formally withdrawn might possibly have more in common with persistent students than with students who withdrew without notification. It was decided to keep the groups separate to examine this evidence.

Table 8.23 therefore shows the percentages of students who had positive scores for the independent variables within the three groups of respondents who completed, formally withdrew and withdrew without telling the university. For example, of the students who completed, 97% had support with their studies; of those who formally withdrew, 94% had support; and of those who left without notifying the university, 89% were supported.

As can be seen from Table 8.23, six factors were statistically significant at the level of $p < 0.01$. A seventh, the life-challenger, was significant at the level of $p < 0.05$. On examining the table, it needs to be remembered that one group, those who had completed, was more than six times larger than either of the other groups. This perhaps suggests that results with very small numbers in any cell should be treated with caution. Based on this premise, factors that might be considered to be of importance would be 'support', 'having no new stresses', 'good health/ would try to stay if ill' and 'would try to stay if there were a

crisis'. Possibilities, although with small numbers in this study, would be 'studying strategically' and 'perceiving that they were successful'. The factor of the 'life-challenger' might also be included in this list of possibilities.

Table 8.23 – crosstabulations of the independent variables against the dependent variable

factor and no. of students within each group	students who completed (n=559)	students who formally withdrew (n=87)	students who withdrew without notification (n=89)	factors significant at p=<0.01
has support with studies (n=701)	77% (n=541)	12% (n=81)	11% (n=79)	✓
uses efficient coping strategies (n=423)	76% (n=321)	11% (n=48)	13% n=54)	
life-challenger (n=131)	84% (n=110)	8% (n=10)	8% (n=11)	
can juggle roles successfully (n=197)	75% (n=148)	13% (n=26)	12% (n=23)	
thinks study is successful (n=68)	94% (n=64)	4% (n=3)	2% (n=1)	✓
loves learning (n=95)	85% (n=81)	10% (n=9)	5% (n=5)	
positive early educ. experiences (n=314)	73% (n=228)	14% (n=43)	14% (n=43)	
interacted well with tutor and OU (n=347)	80% (n=277)	10% (n=33)	11% (n=37)	
good health/would try to stay if ill (n=618)	80% (n=497)	10% (n=59)	10% (n=62)	✓
studied strategically (n=81)	86% (n=70)	12% (n=10)	1% (n=1)	✓
no new stresses (n=465)	83% (n=388)	10% (n=33)	7% (n=44)	✓
would try to stay if there was a crisis (n=260)	85% (n=210)	9% (n=22)	6% (n=15)	✓

The crosstabulations are presented in this way because the aim of the research is to examine the relationship of the model factors to persistence. So it should be noted that if the crosstabulations in the table were presented as percentages of total students in the sample who had completed, formally withdrawn or left without informing the university, the results would appear less dramatic, although, of course, this would not alter the significance of the results and the problem with the small numbers would remain. For instance, of those respondents who completed, 21% were life-challengers, of those who formally withdrew, and also of those who left without notifying the university, 13% were life-challengers.

When considering the suggestion that students who had formally withdrawn were more like those who had persisted than they were like students who had withdrawn without notifying the university, it appears from this table that there is no firm evidence that this is the case. While it could be argued that in the factors 'studying strategically', 'claiming to love learning' and 'would try to stay if there were a crisis' there were indications that persistent students resembled those who had formally withdrawn, other results showed the opposite. It was decided to keep the three groups during the remainder of the analysis, at least until they were shown to be unnecessary.

This part of the analysis had treated the factors as entirely separate, but the prototype model (ibid. p.201) had divided the factors into three levels and made an assumption that the 1st level contained the most important factors, level 2 comprised the next most important factors and the 3rd level, which had six of the factors, contained the least important factors. Although initial analysis of the quantitative data did not provide unambiguous support for these model 'levels', a further attempt at analysis was made by collapsing the data to combine both the first level factors and the second level factors to examine the frequencies. Each of these factors had already been produced by combining the questionnaire items and a further combination resulted in very small overall numbers which, although interesting, could not be accepted as valid results without further research. They are reported in Table 8.24, however, because the results suggest that using the three groups of independent variables might produce quite different results with larger raw numbers. This table differs from earlier tables in that it shows the respondents within the factor levels who completed, formally withdrew and withdrew without telling the university. Of the total of 559 students in the survey who completed their courses, 71 had positive responses to all the first level factors. Of the 87 students who had formally withdrawn, 8 had positive responses and of the 89 students who had withdrawn without notifying the university, 11 had positive responses. Data in line one of Table 8.24 shows

that 80% (71) of students who had support *and* good coping strategies *and* who were life-challengers completed, 9% (8) formally withdrew and 11% (10) withdrew without notifying the university. The table also provides this information for those giving positive responses to all the second level factors.

Table 8.24 - Crosstabulations of completion rates with first and second level of model factors

level of factor	students who completed	students who formally withdrew	students who withdrew without telling the university
first level (n=89)	80% (n=71)	9% (n=8)	11% (n=10)
second level (n=21)	86% (n=18)	5% (n=1)	10% (n=2)

Table 8.24 indicated that there might be a trend, especially at the first level, which had slightly larger numbers, to support the validity of the factor levels. However, despite the statistically significant result for the 2nd level ($p<0.01$), the numbers were so small as to make statistical testing unreliable.

Until this point in the research, descriptive statistics had been used to examine the data and analysis of the results had produced a number of important conclusions. There was evidence that differences between demographic groups might affect persistence and analysing the model factors had produced further evidence about the characteristics of students who might be expected to persist. Given the statistically significant information so far described, it was thought that it might be useful at this point to explore the possibility of predicting persistence by using inferential analysis. Producing statistics for a database that was not set up to facilitate multivariate methods of analysis presented its own difficulties, but it was felt that the importance to the model of the interaction between the identified factors justified testing it in this way, at least at a preliminary level. Even if results proved not to be conclusive, there could be important information to take forward for future research. As there had been no statistical attempt made to validate the questionnaire, it was also felt that there might be support for at least some of the items and this would justify using them in further research to refine the model.

The next section, therefore, looks at the results of investigating the data using inferential analyses that could point to model factors that might be statistically significant in the prediction of, or association with, persistence.

Inferential statistics

The three categories of 'completed', 'formally withdrawn' and 'withdrawn without notification', as outlined on page 236, were retained for the multivariate analysis.

However, as the factors had all been coded as nominal or ordinal variables, there was a limited range of inferential possibilities. It was ultimately decided to use discriminant analysis and logistic regression. Discriminant analysis attempts to predict the likelihood of individuals falling into specific groups depending on their characteristics. So the likelihood of students who were life-challengers completing their course might be predictable using this technique. It also had the advantage that multiple dependent variables could be used, allowing the analysis to be run for all of the conditions; completing, formally withdrawing and withdrawing without notification. In fact, three combinations of dependent variables were used: -

Group 1 (Gp1) included all three conditions, 'completing', 'formal withdrawal' and 'withdrawal without notification' as separate divisions of the dependent variable.

Group 2 (Gp2) combined the 'formal withdrawal' group with the 'completing' group giving two divisions (the qualitative study had indicated that the students who had formally withdrawn might resemble those who had completed more than they would resemble those who had withdrawn without notification) Group 3 (Gp3) combined the 'formal withdrawals' with the 'withdrawal without notification' again giving two divisions (those who had completed and those who had not).

The logistic regression could only be run with two groups of the dependent variable, so was produced with groups 2 and 3 as above. Logistic regression attempts to discover

associations between dependent variables and the factors individually, while still taking the others into account. There would have been an additional option to try multinomial logistic regression which could have dealt with more than two groups of the dependent variable, but it was felt that this might be left until the results of the other two methods were completed. In the event it was not considered necessary to use this method. The method used to test the predictive agreement between variables in the discriminant analysis was Cohen's kappa score. Values in this measure run from 0 to 1, the latter score betokening perfect agreement between variables.

Discriminant analysis

Using all factors produced the results in Table 8.25 for the three groups. None of the results produced a high predictive result and the kappa scores were low. Table 8.26 shows the results after stepwise analysis was performed, and the residual factors remaining.

Table 8.25 - discriminant analysis - predictive scores for the three groups

grouped dependent variables (all factors)	% predicted correctly	kappa score
gp 1 - 3 separate conditions	57%	0.18
gp 2 - 2 separate conditions	65%	0.14
gp 3 - 2 separate conditions	67%	0.24

Table 8.25 shows that, when tested against the completion figures for the students in the sample in this study, the preliminary model appeared more promising as an indicator of persistence when used with Gp 3, which combined the students who had formally withdrawn with those who had left without notifying the university. This was also the case with the results of the stepwise regression (Table 8.26). It seemed that whether students had formally withdrawn or withdrawn without notification was not as important as it had been thought. As the study was intended to measure persistence rather than

attrition, this was a useful result. This group also produced an outcome of five factors from the stepwise regression

Table 8.26 - discriminant analysis - factors remaining and predictive score after stepwise analysis.

grouped dependent variables	factors remaining - students who had: -	% correctly identified	kappa score
gp. 1 - 3 separate conditions	-been supported: -studied strategically: -had no new stresses: -good health/try to persist:	57%	0.18
gp 2 - 2 separate conditions - completed + formally withdrawn	-been supported: -studied strategically: -would try to persist if they had any crisis:	49%	0.09
gp 3 - 2 separate conditions - formally withdrawn + withdrawn without notification	-been supported: -studied strategically: -had no new stresses: -had good health: -interacted well with the organisation:	66%	0.25

Of the factors remaining, the presence of the factor for support caused no surprise, but the appearance of the factor for strategic study was unexpected, as there was only a small group of students who had met the criteria for this factor (Table 8.18). Despite the small size of the group of students who had studied strategically (81 in total), in the crosstabulation of the independent variables with the dependent variables (Table 8.23), 70 of these students had persisted (86%).

Trying to persist if personal illness intervened was also not unexpected as 86% of the students had agreed or strongly agreed with the statements comprising this factor (Table 18.8) and 90% of students who had completed scored positively on this characteristic (Table 8.23); significantly different from students who had not completed.

Less expected was the appearance of the factor of students perceiving themselves as interacting well with the organisation. Only 48% of students had also scored positively on the frequencies of this factor (Table 18.8) and only half of the students who completed perceived themselves as having interacted well with the organisation, a non-significant

result in the crosstabulations of the independent with the dependent variables (Table 8.23). More positive results were seen for students perceiving themselves as having no new stresses; 64% of all students scored positively in the count of frequencies of factors appearing (Table 7.18) and a significant result of 70% of those who completed thought that they had no new stresses.

Discriminant analysis was also run on the three first level factors in the model, a combination of the first and second level factors, and the third level factors. The results are shown in Table 8.27. The percentage prediction was somewhat improved for the first level factors when students who had completed were combined with those who had formally withdrawn, although the kappa score was still very low.

Table 8.27 - discriminant analysis run for model levels - first level factors, first and second level factors, and third level factors.

grouped independent variables	gp 1 - correct predictions	gp 2 - correct predictions	gp 3 - correct predictions
first level factors	49% (0.05 kappa score)	87% (0.12 kappa score)	77% (0.09 kappa score)
first and second level factors	45% (0.09 kappa score)	68% (0.10 kappa score)	54% (0.11 kappa score)
third level factors	56% (0.17 kappa score)	59% (0.11 kappa score)	69% (0.25 kappa score)

Although none of the predictive scores was particularly high and the kappa scores measuring the agreement between variables were very low, there were some changes in values when the dependent variables were divided into two conditions rather than three. It supported the thesis that persistence could be most usefully measured against all the students who had withdrawn.

Logistic regression

The logistic regression technique was not designed to deal with Group 1 - where the dependent variable was separated into completed, formally withdrawn and withdrawn without notification, so Groups 2 and 3 alone were used at this stage.

For Group 2, which combined the students who had completed with those who had formally withdrawn and measured them against students who had withdrawn without informing the university, the logistic regression gave the results in Table 8.28 after the stepwise regression was completed.

Table 8.28 - logistic regression for Group 2, giving the factors left, the significance levels and the estimated odds ratio (Exp.(B))

factors left in model after regression	significance level	exp.(b)
students who study strategically	p=< 0.05	11.32
students who would try to stay if ill	p=< 0.01	3.4
students who have support	p=< 0.05	3.7
students who have no new stress	p=< 0.01	0.5

Table 8.28, therefore, shows that only four of the twelve factors were left in association after the stepwise regression. The odds ratio suggests that students who study strategically are more than eleven times more likely to complete, students who have support are almost four times more likely to persist and students who have good health/would try to stay if ill are more than three times more likely to finish. Students who have new stress are also more slightly less likely (0.5) to complete than those who have no new stresses. In logistic regression, therefore, as well as in the discriminant analysis, support, studying strategically and the student's determination to stay if they were ill were still significant

Table 8.29 shows the logistic regression that applies to Group 3, which combines the students who formally withdrew with those who withdrew without notifying the university. In this Table, there are four factors remaining at the significant level - the same four as in the Group 2 analysis. However, in Group 3, two extra factors come close to achieving significance and these have been included because of their estimated odds ratio. Students with support are three times more likely to complete, those who love learning and study strategically are twice as likely to finish. Students with good health/would try to

stay if ill are four times more likely to complete and those who interact effectively with the organisation are one and a half times more likely to finish. As in the previous analysis (Table 8.28), having no new stress also increases the likelihood of completion.

Table 8.29 - logistic regression for Group 3, giving the factors left, the significance levels and the estimated odds ratio (Exp.(B))

factors left in model after regression	significance level	Exp. (B)
students who study strategically	p=<0.05	2.3
students who would try to stay if ill	p=< 0.01	3.9
students who have support	p=<0.05	3.2
students who have no new stress	p=<0.01	0.5
students who interacted well with tutors and institution	p=0.06*	1.5
students who love learning	p=0.06*	2.1

*Factors less than significant level, but have increased odds of completion.

The life-challenger factor

This factor emerged from the literature review as a strong characteristic or cluster of characteristics (e.g. Scheier & Carver, 1992; Lefcourt, 1976; Kobasa, 1979; Friedman, 1991) and seemed to be validated by the qualitative analysis. Although this factor disappeared in the stepwise regression in both the discriminant analysis and the logistic regression, its relation to completion meant that it was important to test this factor against the other model factors.

The anticipated problem with this was the large central tendency found in the frequencies for the life-challenger, which would challenge the result of crosstabulations with persistence (Tables 8.18 and 8.23). However, as 18% of the total respondents were life-challengers, and 84% of these completed, there was enough evidence to examine the ways in which the factor 'life-challenger' might crosstabulate with the other model factors. This was done in the following table (Table 8.30) and the crosstabulations are presented as percentages of students who were life-challengers, were not life-challengers or had some

of the attributes of the life-challenger, for the various factors - e.g. - of those students who were life-challengers, 71% had good coping strategies. 60% of those who were not life-challengers had good coping strategies, as did 56% of the students who were 'sometimes' life-challengers.

The major problems that emerged from Table 8.30 were, firstly, very small numbers in the column 'student not a life-challenger and, secondly, the large central tendency where most of the respondents fell into the category of 'life-challenger sometimes'.

With such small numbers, it would be dangerous to draw conclusions without further research, but it could be argued that the life-challenger might still be linked with: -

- Having and using support
- Using good coping strategies
- Interacting well with tutors and the institution
- Perceiving themselves as having good health and would try to persist even if ill
- Thought that their lives were going well and they were managing their studies well
- Would try to stay if there was a crisis

The original definition (p.146) listed the attributes of the life-challenger as: -

- Being motivated and determined
- Having an internal locus of control
- Being committed to life's activities
- Having a positive attitude to long-term goals
- Having a positive attitude to challenges and change
- Being self-confident
- Being an optimist
- Being able to organise study and manage time
- Having a hardy personality (able to deal with crises competently)
- Perceiving themselves as managing life positively and feeling that their lives have a coherent pattern.

Table 8.30 - crosstabulations of the factor 'life-challenger' with the other eleven factors

model factors	life-challenger - yes	life-challenger - no	life-challenger - sometimes	significant difference - Pearson χ^2 test
has support	97% (n=127)	60% (n=3)	96% (n=535)	✓
good coping strategies	71% (n=92)	60% (n=3)	56% (n=309)	✓
can juggle roles	29% (n=37)	20% (n=1)	27% (n=150)	
loves learning	16% (n=34)	20% 9 (n=1)	12% (n=67)	
feels successful in study	19% (n=25)	nil	7% (n=39)	✓
positive early educational experiences	36% (n=47)	80% (n=4)	44% (n=244)	
interacted well with tutors and institution	63% (n=82)	60% (n=3)	45% (n=248)	✓
good health/would try to stay if ill	94% (n=122)	80% (n=4)	84% (n=459)	✓
studied strategically	19% (n=24)	20% (n=1)	10% (n=54)	
had no new stresses	92% (n=120)	nil	58% (n=324)	✓
would try to stay if had crisis	50% (n=65)	20% (n=1)	31% (n=171)	✓
total no. of students n=695	18% (n=131)	1% (n=5)	76% (n=559)	

The definition above does have many elements in common with the results for the life-challenger found in the research. One more statistical check was made by crosstabulating the life-challenger with the statement 'I like change because it often means that things are going to get better'. The frequency of agreement with this statement by the total group of respondents was 32% or 238 respondents (Table 8.3, p. 211). The choice of this statement was made because the literature had stressed the ability of the life-challenger to anticipate change as positive (Kobasa 1979, Antonovsky 1993, Scheier and Carver 1992). The crosstabulation showed that 62% of life-challengers strongly agreed/agreed with the statement and 7% strongly disagreed/disagreed. Compared with the total response, life-challengers were almost twice as likely to agree with the statement. The conclusion may therefore be that there is evidence that points to the existence of a type of personality that

will be predisposed to persistence; However, it was thought that, in order to begin to describe the life-challenger, a great deal of qualitative research would be needed to identify accurately the attributes of such a personality. This was outwith the scope of the present study.

The research and models of persistence

The review of the six representative models of persistence and attrition in chapter 2 concluded, after considering factors most likely to provide information about part-time adult learners, that it would be useful to give preliminary consideration to those factors which seemed to be represented in a majority of models (p. 35-36). These factors were: -

- Interaction with the institution
- Social integration (with the proviso that this referred to external integration with family, colleagues and friends rather than with the institution)
- Environmental factors, such as support, the study environment, other responsibilities and employment
- The approach to study, or how students organised and coped with their studies
- Inherent characteristics, including motivation, flexibility, a clear goal and self-confidence
- The appearance of traumatic occurrences during the course. These might include changes in any life circumstances, unexpected events and illness or bereavement.

Because the sample of respondents comprised distance learners who had few opportunities to interact with the university, the research reported in this study tested the importance of interaction with the institution by Likert scale statements about students' interaction with their tutors (the only person or people with whom they had to interact) and interaction with the regional office. Students agreed overwhelmingly that interaction with the tutor was useful, in terms of tutorials, feedback and support (Table 8.12, p. 221), but were less certain about the value of advice from the regional office (Table 8.13, p. 222). 48% of

students interacted well with both tutor and institution (Table 8.18, p. 237), but when the independent variables were crosstabulated against the dependent variable, although 50% of those who persisted thought they had interacted well with the institution, there was no significant difference in interaction between learners who had persisted and those who had withdrawn (Table 8.23, p. 237). While it could be argued that the sample was different from the more traditional part-time adult student, who might see a tutor regularly, the analysis does seem to show that integration with the institution may not be as important to adults as it would be to young fulltime students, provided they have contact with an individual tutor or counsellor. MacKinnon-Slaney would suggest that integration with the institution depends upon individual student abilities, learning the university system and developing self-confidence (MacKinnon-Slaney (1994).

Social integration, not necessarily with other students, as suggested by Tinto (1975) or Tillman (2002), seemed from the results of this study to be important in terms of outside encouragement, as defined by Garland (1993), Kember (1995) and Bean & Metzner (1985). The research here shows that social integration is a part of the area of social and environmental factors affecting learners' persistence. The seminal importance of support for the students in this study seems to validate these factors and suggest that environmental and social pressures will be more important to the adult learner than perhaps they would be in the lives of traditional young fulltime students.

The approach to study was included in all the models reviewed, but varied from lack of preparedness for third level study, through previous academic experiences to the ability to cope with the demands of study. Bean & Metzner (1985) highlighted the pressure of factors such as employment for adults, although the study reported here did not specifically test for the effects of employment. In the analysis of factors that could be seen to contribute to an approach to study, persistent students who studied strategically and who perceived that they were successful in study were significantly more likely to complete

than those who withdrew (Table 8.23, p. 237). If lack of preparedness was considered to reduce persistence, mentioned specifically by Tillman (2002), and implicitly in other models as 'previous experience', then it would be expected that students who had 'A' levels would be more likely to persist. When the dependent variable was crosstabulated against the previous educational qualifications, there was a significant difference between the persistence of students with 'A' levels and those with 'O' levels or without any previous educational qualifications ($p < 0.05$).

Inherent characteristics were included by Tinto (1975), Bean & Metzner (1985), Garland (1993) and MacKinnon-Slaney (1994). These included motivation, flexibility, a clear goal, a deep learning approach and self-confidence. The research in this study found that students who studied strategically, perceived that they were successful in study and would try to keep studying if there were any crises or new stresses were significantly more likely to persist, thus supporting the findings from the models. However, there was no real effort to look for a cluster of characteristics that, together, might encourage persistence, with the exception of the work of MacKinnon-Slaney (1994), who identified, under her model component of 'Personal Issues', self-awareness, willingness to delay gratification, clarification of career and life goals, mastery of life transitions and a sense of interpersonal competence (MacKinnon-Slaney, 1994, p.269).

"Thus, the first factor, self-awareness, relates to those relatively stable personality characteristics and qualities that propel them [students] through the competitive environment of formal education. In particular, a robust sense of self, a hardy academic self-concept, self-assurance in achievement situations, a healthy dose of achievement motivation and a certain degree of confidence in managing the bureaucracy must be present on a day-to-day basis." (MacKinnon-Slaney, 1994, p. 270)

She maintains that students lacking these attributes may find it difficult to persist with study. She states that adults reflect on their goals, not only before beginning to study, but during their study career; the present study also pointed out that students do not necessarily know their precise goal when they begin to study, but may refine their objectives over the years.. This cluster of factors, together with the emphasis which she

placed on the individual nature of adult learners, comes closest to the findings of the analysis in this report.

Traumatic occurrences during the study period were not researched for any of the models, except for Garland (1992), who included 'changes in circumstances' under situational factors. This was hardly surprising, as no research plan could allow for every possible crisis that might affect students. However, it was thought, in this study, that whether crises affected persistence might depend upon the intrinsic characteristics of the student, and that many learners might be determined to continue despite problems. That this determination to persist might be overcome by the depth or length of a crisis was less important than the student's desire to continue despite problems. This was corroborated in the analysis, as there were significant differences found between students who persisted and those who did not in the two Likert scale items testing for the occurrence of new stresses and the determination of the student to try to persist if there was a family or personal crisis.

Overall, there were difficulties in comparing the findings from the models reviewed in the literature with the results of the study presented here. Although there were factors that were found to be important in both the current work and the reviewed models, the emphasis in this report is specifically on the student characteristics and factors affecting the individual adult learner. This meant that it was not possible to validate the preliminary model, although it was possible to define factors that could, with a degree of certainty, be said to influence persistence.

Summary of the findings from the research

The research undertaken for this dissertation produced a considerable amount of material, some of which was corroborated by the literature and existing models of persistence; some of which had not previously been considered. The initial model proved to possess some

valid attributes, although much more research needs to be done here. It is in fact debatable whether any model, no matter how carefully constructed, will be able to predict the persistence of every adult student. However, any predictive factors that can be identified will be of use, not only to students, but also to lecturers and tutors and, perhaps most important, to the higher education institutions that deal with adult learners.

The hypotheses to be investigated, as set out in Chapter 6, pp 155-156, related to the preliminary model produced as a result of the qualitative study. At that stage they were divided into three discrete levels; the quantitative research showed that the levels were not necessarily totally appropriate. The hypotheses that can be supported by the research are: -

- Students who are supported will be more likely to persist
- Students who can adopt relevant and flexible coping strategies will be more likely to persist
- Students who adopt a strategic approach to study will be more likely to persist
- Students who perceive themselves as having no new stresses will be more likely to persist
- Students who have good health and are determined to stay even if ill will be more likely to persist

Hypotheses that are less certain, although they would benefit from further research, are: -

- Students who are life-challengers are more likely to persist
- Students who can juggle roles effectively are more likely to persist
- Students who interact well with the institution are more likely to persist

Hypotheses that, although in some circumstances appearing useful, are not currently supported by the evidence in this study are: -

- Students who perceive that they are successful in study are more likely to persist
- Students who have no new family crises are more likely to persist
- Students who claim to love learning are more likely to persist

The disaggregation of the model factors showed that the variables which had been produced from the questionnaire items might not necessarily be arranged in the optimum pattern. As was explained earlier, the alternatives presented after the completion of the qualitative study were to repeat the research with a larger group of students, or a number of groups, refining and testing the findings: perform an analysis of variance on the initially defined factors: or undertake factor analysis. The decision to continue with setting up the quantitative analysis was taken firstly because the literature suggested that research undertaken with both qualitative and quantitative methodology might be more reliable (Rosenmayr 1982, Cornwell 1984); and secondly, because it was felt that at this preliminary stage, there would be some benefit in gathering information from a larger group of students.

Despite the inadequacy of the model to supply a final solution for the prediction of persistence, the information gained from the research was sufficient to claim to have moved forward the search for factors affecting adult learning.

There is considerable evidence from the research that there may be a cluster of characteristics that, taken together, will define the students most likely to succeed and who might be called life-challengers. These characteristics have been discussed on pp.245-247 (ibid.), and, although this finding is new and of considerable interest, a great deal of further research would be needed to demonstrate and define the existence of this factor and how it would affect persistence.

By using the results from the analysis of the research as reported in this chapter, it would be possible to produce a new tentative model, which might look like Figure 8.2, which combined the three factors that tested the students' perception that they could overcome illness or other crises and would try to persist. These three factors seemed to show the same two characteristics; determination and a positive outlook on life, so could be

combined into a single factor. These characteristics were two of those originally included in the profile of the life-challenger. In Figure 8.2, the dotted lines represent factors that were discovered to be less important than those with continuous lines.

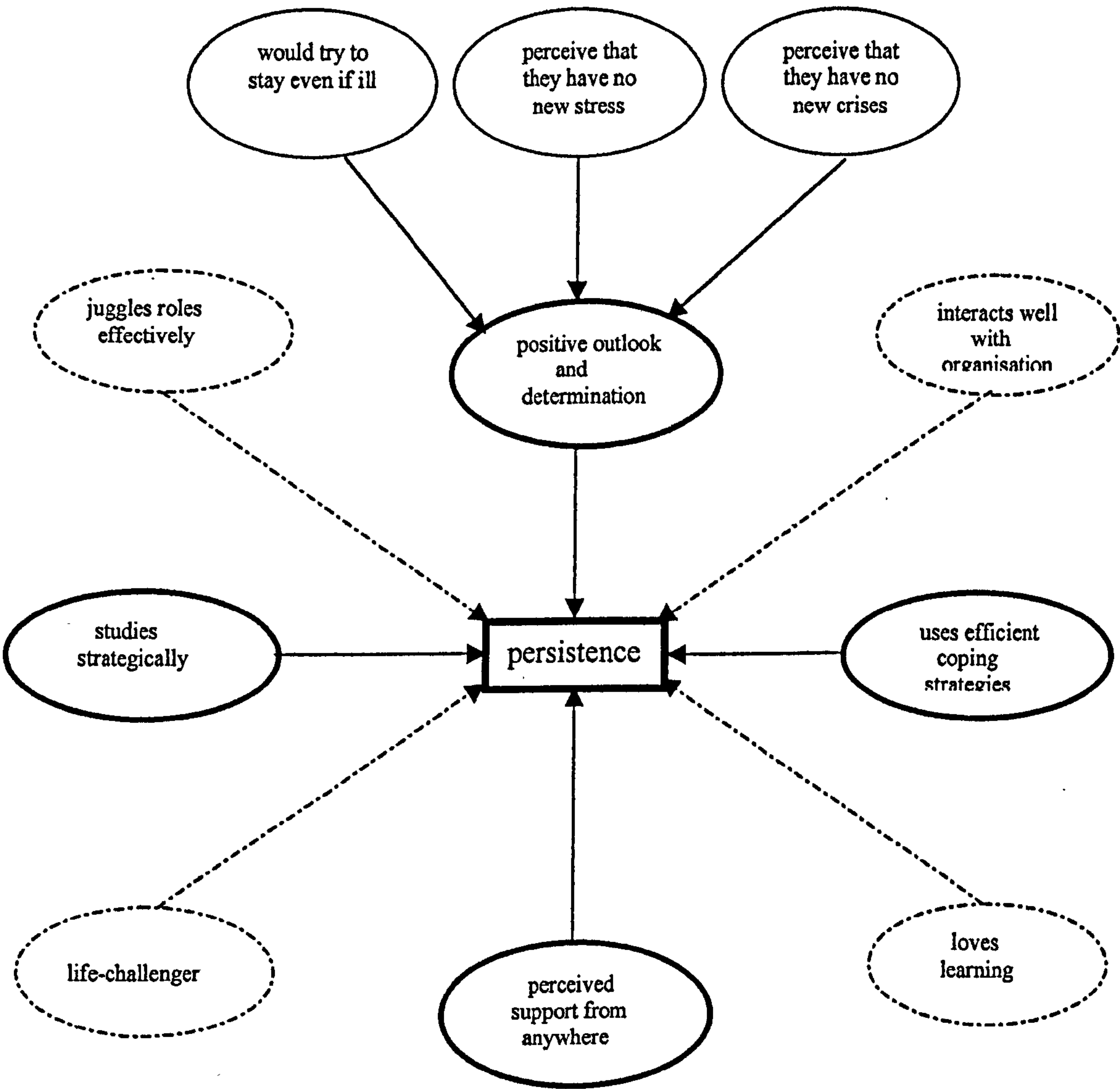


Figure 8.2 - factors affecting student persistence as an outcome of the research

Conclusion

Despite the inadequacy of the model to supply a final solution for the prediction of persistence, the information gathered from the research was sufficient to claim to have moved forward the search for factors affecting adult learning. The findings have important implications for the higher education institutions who offer part-time courses for adults. While this chapter has reported and summarised the results of the study, the next chapter will outline the strengths and limitations of the research and provide some recommendations based on the findings. It will also suggest further research that is needed to take the present study forward.

Chapter 9

Conclusion

Introduction

This chapter begins by summarising the achievements, research findings and limitations of the study which was carried out by a combination of a literature review, a qualitative study and a quantitative survey of part-time adult learners. This section is followed by a discussion on how the results of the study reported in this paper might add to the knowledge gained from existing models of persistence. The chapter will continue with suggestions for further research on factors affecting adult part-time learners. The final section of the chapter will suggest some considerations, based on the outcomes from this research, that might be useful for institutions offering part-time learning programmes to adults.

A consideration of the achievements of the research

The research reported in this study was intended to identify the factors that are related to persistence amongst adult learners, by using a selection of methods to try to establish an initial model that might be further tested in the future. It was felt that many existing models of persistence did not account for the possible differences between traditional fulltime university students and part-time adult learners (Tinto 1975, Tillman 2002). It was further thought that models such as Kember's (1995) and MacKinnon-Slaney's (1994) depended upon cultural differences that might not apply to part-time adult learners in the United Kingdom. Bean & Metzner (1985) produced a model for adults attending college on a part-time basis and Garland (1993) investigated factors affecting distance learning for adults. Both of these agreed that there were outside influences that were important for adults, but no work was carried out to examine these by any of the authors.

The following achievements resulted from the research: -

- A literature review of existing research and the identification of 36 possible factors affecting persistence
- A qualitative study undertaken to test and refine the factors from the literature, the analysis of which identified 12 factors that appeared to support persistence
- A quantitative study, based on a preliminary model of the 12 factors; the analysis of which indicated that there was evidence that, given more extensive and rigorous testing, many of these factors might be validated in the future to help to predict persistence

Literature review

The review of the literature on persistence was based on previous educational research, including a representative selection of the better-known models of persistence as indicated in the previous section. Material from health research into the intrinsic characteristics of individuals that would lead them to recover more quickly from illness, or prevent them from becoming ill under stressful situations, was introduced, as it was felt that theories of dealing with health-related stress might be applicable to adult learners who were coping with study-related stress. These two fields have not been combined before in a study similar to the present report and they were found to complement each other particularly well. The literature review showed that research into stress connected to ill-health, together with factors that predisposed patients to recover after major medical interventions, could support the literature in educational technology already investigating student potential for persistence (Scheier and Carver, 1992; Lefcourt, 1976, Kobasa 1979). These studies dealt with positive thinking, an understanding of what was required in a new and challenging situation, and the willingness to adapt to a realistic expectation of what might be needed. The work of Antonovsky (1993) on the development of successful behaviour in adults, through making sense of their lives, feeling that they had the resources to be successful and that life was worth while, fitted with, and extended the work of educational

researchers (Gibson, 1991; McVey et al., 1996; Hibbett, 1986;). Friedman (1991) identified the 'healthy' personality as someone who is competent, enthusiastic and confident, and this was echoed by the work of both Urzainqui Dominguez (1996) and MacKinnon-Slaney (1994). Urzainqui Dominguez suggested that a cluster of characteristics defined in terms of 'adulthood' was needed for persistence, and MacKinnon-Slaney found similar characteristics necessary for success in part-time adult learning. Thus a combination of these two fields of research was able to strengthen the thesis that there were particular factors that would increase the persistence of part-time adult learners.

From the literature described above, a group of 36 factors was identified, which seemed from the literature to describe the persistent learner as well as the healthy individual. These comprised situational factors, concerns and changing circumstances that might threaten persistence, and personal characteristics. There was some promising evidence that pointed to the thesis that adults with a particular cluster of characteristics might be identifiable as students who would be more likely to persist than those without these characteristics. The individuals who met the criteria for the characteristics were named 'life-challengers'. The research was able to conclude that life-challengers were indeed more likely to persist with study, although more research would be needed to define precisely the characteristics of these individuals.

The qualitative study

A qualitative study was carried out which tested the factors identified from the literature and established them as worthy of further investigation. This was undertaken with students who had completed, students who had formally withdrawn and those who had left without notifying the university. This study also identified a possible new factor which was that students who liked learning were more likely to succeed than those who did not. This was tested in the final quantitative analysis but was not found to be statistically significant,

perhaps because many students were shown to have instrumental reasons for studying and were not necessarily learning for pleasure.

The results from the qualitative study enabled the factors from the literature to be combined and refined into twelve factors that seemed to be important for persistence.

These factors were combined into a preliminary model for testing. Although this model had certain elements in common with other models of persistence, such as Kember's Model of Student Progress (1995) and MacKinnon-Slaney's Adult Persistence in Learning Model (1994), it was constructed by a different method and contained new factors, not previously tested, which dealt, mainly, with the factors extrinsic to the interaction between the student and the organisation.

The quantitative study

Finally, based on the model and its factors, a student survey was carried out by mailing a questionnaire to a random sample of 990 students at various stages of a part-time degree. The results of the analysis of this survey, based on the 735 students who responded, produced new information about student persistence and corroborated some of the evidence from previous studies undertaken by other researchers. Although this research was preliminary in nature, the conclusions from the quantitative research supported the findings from the qualitative study, providing evidence that there were indeed good and sufficient reasons for concluding that there was a group of significant factors that would predispose students to persist with study.

Outcomes of the research

The factors that were shown in this research to be important for persistence included support for the student, optimism and determinism, learning skills, coping and juggling abilities and effective interaction with tutors. Other findings included some demographic

influences on persistence and indications that there might be a cluster of characteristics that might predispose a student to persist.

Support

From the analysis of the model factors and the initial descriptive measures of dependent and independent variables it appeared that support for the student was seminal. Earlier research had concluded that support was important to adult learners. However, this study indicated that, while support was indeed the most important factor contributing to persistence; it was not necessary, as had been assumed, that this should come from the student's close family. Support could be provided by anyone, although it is possible that there may be advantages to having support from someone who is either studying themselves, or has recently studied. It was also found that women might need more support, and from different people, than men appeared to require. Women needed, and got, support from a wider range of people, both before beginning to study and during study. This may reflect the fact that women *need* more support than men, but it might also mean that women need to consult others about study more than men do. This need for women to have support from more individuals was endorsed by their preference for coping strategies that involved consultation with others, where men were more likely not to consult with others before solving their problems. This has implications for institutions who hold courses for adult learners. Nor can it be assumed that, because students are adults, they will be less in need of counselling and tutorial support than younger fulltime students. They may, in fact, be more vulnerable because of lack of confidence and consequently more likely to drop out. It is also suggested that the optimum support for students may be provided by academic tutors or trained counsellors rather than by a university administrative service.

Optimism and determination

Students also needed to be optimistic and determined, as these students were found to be more likely to persist. In fact, they may be over-optimistic, as the majority of respondents in this study thought their study would be unaffected by their own illness or work-based problems; yet the qualitative study found that illness was the most common reason for leaving courses, even if only temporarily. This optimism and determination to succeed were part of the identifiable traits of the life-challenger; although in the initial model for this study they were not specifically included in the life-challenger factor. It is important to reiterate that this optimism did not describe what might actually happen in the case of illness, only that the students were certain that they *could* keep studying despite illness or crisis. 64% of students were optimistic enough to think that their lives were going well and they were coping satisfactorily with their studies, although few were willing to claim outright that they would be successful. Men were twice as likely to perceive that they were succeeding with their learning as women were.

Learning skills

Adult students also needed skills that not all necessarily possessed, if they were to persist with learning at higher levels of education. They needed, above all, to be able to manage their learning and this entailed a number of skills, not least coming to terms with an approach to learning that will fit with their other roles. While the presence of other roles in the lives of adult learners have been considered as causing problems for study (Peters 1992; Kirkup & von Prümmer 1990; Clouder 1997), it can be concluded, from the results in this study, that students may actually have difficulty in selecting efficient and effective methods of learning. This, in turn, means that their study may cause problems with their other roles in life. The most important skill required to deal with the management of learning is strategic learning, that is to say, students need to study consistently, knowing exactly what they should read and select for assessment purposes.

They need to be able both to learn and to reflect on their learning. The research found that learning strategically was significant for persistence and yet it was a skill few students claimed to possess. Research has shown that reading to understand and make sense of the material improves the student's ability to cope with academic material (Gibbs 1980; Entwistle 1996; Jarvis et al 1998), but in this study, it was shown that this also contributes to persistence. If this is the case, higher education institutions need to be aware that this skill is one of the first that needs to be taught to new students. The results of this research also indicated that students became no more sure of their ability as they progressed towards a degree, which would indicate that strategic learning does not necessarily merely come with practice but has to be learned as a skill to be deployed throughout their study time at the different levels of academic work.

Coping and juggling

In addition to developing strategic learning techniques and avoiding too much surface or deep learning, learners needed to be able to cope with a variety of situations, not least making time for study and organising their learning. Good coping skills contribute significantly to persistence in students and it is possible that without these, dropout is much more likely. An ability to juggle their roles was also important, although in fact, it seemed that few women, and even fewer men, asked for practical help from their partner or close family while they were studying. Despite this finding, women were more likely than men to use good coping strategies all the time and they were also more adept at juggling roles. They tended to have better previous educational experience and would interact more with tutor and institution.

A majority of students used suitable coping strategies, trying first to work out their own problems, then often consulting others. 80% of students who had high scores on the first level factors in the model (having support, good coping strategies and being a life-challenger) completed their courses, although collapsing the categories meant that the

results depended on very small numbers. Coping and juggling skills may have been confounded with support by both students and institutions and assumed to be in place, but the research shows that this is in fact not the case for a majority of students.

Interaction with the institution

It was clear from the statistical analyses that interaction with the institution in the shape of the tutor or person responsible for providing feedback and marking assignments was important. Adult learners need to have tutors who treat them as individuals and provide support as well as feedback. Adults may not have studied academically before, but they have life experiences that are in some ways as much use as A-levels may be in preparing them for higher education. Tutors were found to be very important to students: in this study; mention was made of individual inadequate tutors in the qualitative interviews, but these allusions were always made in opposition to the 'wonderful' generality of tutorial support. Although students said they used tutors for academic support, probing during the qualitative study elicited the information that they were often used for 'counselling' contact as well. Less importance was attached to contact with administrative or fulltime faculty staff: for example, only 38% of students thought that the advice given by the regional office was useful (p. 222, Table 8.13).

Demographic effects on persistence

Some demographic influence was demonstrated on persistence, particularly for students with different previous educational qualifications and for students who were younger. Higher previous educational qualifications made it more likely that students would persist, but this might also have been affected by these students coming from backgrounds where they had support from others with high qualifications, or where there were high expectations about education. Persistent students in the qualitative study, reported in Chapter 5, did appear to benefit from other adult learners' support and encouragement. However, it was not shown conclusively that, as adults go through the years of learning,

that they will become more confident about their abilities. Younger students were more vulnerable to dropout. Again, this was not new, as indicated by the Open University research unit (Abbott and Ashby 2001; Slee 2001; Ashby 1996). However, it is important to say that those younger students who stay did as well, or better, than older students: this has implications for any institution dealing with young adults in part-time higher education. They may need initial support at a high level, but when they become confident, can be expected to progress well.

Other findings of interest from the research

One interesting finding was that neither men nor women were necessarily certain about their goals in starting to learn, although in general, men were more likely than women to have instrumental reasons for embarking on study, such as wanting promotion. Goals did not always become clearer to students as they progressed through their studies, so it would be wrong to assume that adult learners essentially know what they are going to do with their qualifications. Goal awareness has been an important component of previous models (Tinto 1975; Bean & Metzner 1985), but there is no definition of goals in these studies and it is therefore reasonable to conclude that goal-setting is an individual decision, which may change over time, perhaps as the student nears an identifiable point, such as the award of a degree. It is also possible that this lack of clarity applies to adults rather than to all third-level students. Young traditional students will apply to undertake a specific qualification, so their goal is set for them from the moment of their acceptance onto a course. Adults may well have a number of needs, from increased self-confidence to a graduate qualification leading to a particular occupation.

The factor 'loves learning', which had come from the results of the qualitative study (Chapter 5) did not appear to be especially important for persistence. More than three-quarters of students with previous higher qualifications claimed to love learning, although this may have been due to the fact that they were more familiar with study. Older students

were also more likely to study because they enjoyed learning. This factor appeared in the stepwise regression as being associated with increased odds of completion.

The model factor of the life-challenger, although not appearing as predictive or associative in the inferential analysis, did link, in the analysis of the descriptive statistics, with many of the characteristics of the life-challenger identified in the literature. It is, however, fair to conclude that definite evidence was produced to indicate that there is a cluster of personal and situational characteristics, which, taken together, will greatly increase the likelihood of student persistence. To research this topic would entail an entirely new research study, but one which might prove to be able to further elucidate the phenomenon of persistence in adult learners.

Summary of research findings

To summarise the research findings, students whose score was high on the model factors in the descriptive analysis were more likely to complete their courses, thus indicating that the model had good initial prospects. This conclusion was supported by the results from the analysis of the inferential statistics, which indicated that students who persisted would be likely to have: -

Had support

Studied strategically

Been certain they would keep studying if they were ill

Perceived that they had no new stress

Interacted well with the institution

Despite low scores on both the discriminant analysis and the logistic regression, the results, when taken together with the analysis of the descriptive statistics, demonstrated that the model showed some promise as an indicator of persistence, especially when completion was measured against the combined groups of students who had formally withdrawn, and those who had withdrawn without notification.

These findings may have implications for all higher education institutions, especially now that more traditional establishments are opening their doors to adults to study on a part-time basis. Many of these universities and colleges may not have spent time in a consideration of the special needs of adults returning to study, and even when, as in the Open University of the United Kingdom, genuine efforts have been made to support students with both academic and tutoring needs, this seems to have been initially based on the understanding that students entering an open access institution would lack the necessary academic skills. This has undoubtedly been shown to be the case in this study for many students, but the research has also shown that there are other factors of equal importance which will affect part-time adult learning and thus persistence.

Limitations of the research

This study was intended to produce an initial model of factors which encouraged persistence in part-time adult learners. There was a belief that the literature should be extensively reviewed, that other research fields might be reviewed as well and that qualitative research should be included. It was considered that omitting students' own perceptions would not give a true picture of factors affecting persistence and that merely using quantitative research based on literature and the researcher's opinion would lose much important information. However, completing the research in this way did produce a number of limitations to the overall validity of the study. These were: -

- Limitations of the qualitative study
- Validity of the model factors
- Possible effects of the introduction of the factor of 'life-challenger'
- Survey factors were not amenable to rigorous statistical testing
- Research subjects confined to OUUK, which has a unique group of students
- Possible inadequacy of producing a model to predict persistence

Limitations of the qualitative study

The most important limitation was the size of the sample. There were twelve students chosen randomly, four who had completed their course, four who had formally left courses and four who had 'disappeared', that is, had dropped out without notifying the university. Although care was taken to gain as much validity as possible from the methodology of this part of the study, reliability was more problematic. Although a second round of interviews with the same students was planned if major discrepancies had been noted, in fact, there were so few of these that only four telephone calls to previous interviewees were required to clear up points of difference. With hindsight, it would have increased the validity and reliability of the study if either a larger sample had been used, or the study replicated with further groups of students. The qualitative study was, in fact, a most useful method of eliciting information and it might also be argued that continuing to work with grounded theory would have been more useful than progressing to the quantitative stage, which, while the work was in progress, was felt to be necessary to test the preliminary model.

Validity of the model factors

The model factors, although they produced encouraging evidence in the initial descriptive analysis; when measured against the dependent variable, were by no means perfectly validated. For example, the factor of the life-challenger might have been improved by the inclusion of Statement 30, 'If I had any sort of crisis at work or at home, I'd still try to finish my course' and/or item 11 in the questionnaire, which asked students to select an option, if they were ill, between (a) trying to continue, (b) stopping studying immediately to get better or (c) leaving the course hoping to return in the following year. With hindsight, these two responses seemed to suggest optimism and determination, two attributes of the life-challenger. The exercise of disaggregating the factors, which provided much positive information, also demonstrated that the questionnaire could have

been improved by being pre-tested for validity through factor analysis or at least by an analysis of variance of the statements and items.

The life-challenger factor

As discussed above, the factor of the life-challenger could have usefully been revised to reflect the addition of other statements. In the present study, this factor tended to confuse rather than clarify the research model. The inclusion of the factor of the life-challenger, although interesting and probably useful, became sufficiently complex to require a completely new piece of research which concentrates on these characteristics.

Statistical analysis

Developing the factors as was done in this research meant that the final quantitative analysis was not open to rigorous statistical testing. Because the factors were based upon the conclusions of previous researchers and the perceptions of students, there was not enough information to set up an interval scale which might have facilitated a variety of inferential analysis methods. The discriminant analysis and logistic regression used, although valid methods, were less than ideal for the nominal and ordinal variables in the factors. Also, as discussed above, to claim validity in inferential research, it would have been necessary prove the validity of the survey items, which was not done. This was not considered necessary because the model and its testing were initially devised to be research that was intended to produce preliminary evidence that an examination of factors affecting persistence was a worthwhile study that might be pursued more rigorously in the future. It was, despite these methodological flaws, considered that sufficient evidence had emerged from the study to prove that further research was justified.

Research subjects

This research was completed with a specific group of adults, all of whom were distance learning students at the Open University in Northern Ireland. Although the literature had

found no particular differences between adults who were studying by traditional part-time modes or through the medium of distance learning, a repetition of the study with adults in part-time regular attendance at a college would help to eliminate the possibility that the results were biased by distance learning, and thus not reliable across other groups of adult learners. In fact, as the demographics for Northern Ireland students differed in some respects from those in other UK regions of the Open University, it would also be important to repeat the research in other areas to see whether the results were even applicable across the Open University.

A valid model to predict persistence?

Although attempts have been made to produce definitive models for persistence, success and dropout in the past, and although some of the best-known of these were used for comparison in the present study, none have succeeded in predicting all the conditions when students will either persist or leave their courses. Research with individual adults is difficult to validate as respondents' interpretations of questionnaires may give false positive or negative replies. It may well be that it would be impossible to provide a model of persistence that would be valid across all cultures and places. However, this should not deter researchers from efforts to find ways to maximise the experience of adults in higher education.

Despite the limitations of the research carried out in this study, it was considered that some preliminary conclusions may be drawn which are sufficiently significant to pursue the validation and examination of the factors identified here.

The research results and models of persistence

In the literature review in Chapter 3, an examination of a representative group of models of persistence and attrition revealed that, in almost every case, little or no research had been undertaken into factors of personality, situation and trauma that might arise during a higher

education course and might result either in students dropping out or persisting. Many of these factors might have been present on entry, although unknown to the institution with which the adult was enrolling.

This lack of examination of factors affecting students before, and as soon as, they actually began to study was understandable, as these were, not unnaturally, regarded as factors about which the institution could do little. As indicated in the introduction to the present work, institutions have assumed that they can only try to retain students by acting to keep them after they arrive and with whatever characteristics they begin their study. The thesis debated here is that persistence depends upon factors that are intrinsic to individuals or a reasonably permanent part of their environment. It is argued that, although a university may not be able to predict or examine these factors, if the most important factors affecting persistence were to be discovered, it would be possible to identify vulnerable students and offer them extra support

Possibly the best-known model was that of Vincent Tinto (1975). In his Conceptual Scheme for Dropout from College, Tinto was dealing with fulltime traditional young college students and the factors he produced for his model had little in common with the results of the present study. While he did consider 'background characteristics', these were limited to: -

- (a) family background, by which he meant the family orientation to learning
- (b) individual attitudes, which were limited to a commitment to the college and the individual's goal and
- (c) pre-college schooling, by which he meant the academic level reached by the intending student

These, he felt, were important because they had implications for the student's loyalty to the college. The current study has found no evidence that family background or pre-college

schooling affected the persistence of the adult learner, and although students were committed to their learning, their goals were found to be unclear, often for some years after beginning to study. Tinto also believed that two of the most important factors for persistence were academic integration, by which he meant academic performance and intellectual development; and social integration, meaning peer-group and faculty interaction. The study here reported found that only 11% of students who persisted felt that they were successful in study (Table 8.23, p.237) and 22% valued support from other students (Table 7.4, p.176). Thus Tinto's model does not appear to predict persistence or dropout for part-time adult learners.

Tillman's model of Barriers to Persistence in Higher Education (2002) claims to consider the needs of adult learners and he does suggest that external commitments may take up time that might be spent studying. He also states that there may be a lack of academic preparedness in adult learners and, in fact, that many adult learners do not have the basic literacy abilities to tackle higher education. However, there is some tension between these two statements, as his solution to the second involves remedial programmes, which will use even more of the adult's precious study time. In the present study, it was found that although there was often a lack of experience of academic learning, there was no evidence that those with lower pre-entry qualifications were significantly less persistent than those with A-levels (Table 7.14, p. 192). Although there was a slight drop in the percentage of students with lower qualifications who were studying strategically, this was not a statistically significant difference (Table 8.21, p. 233).

Both of these models used an Interactionalist approach, which concentrated upon the interaction between the institution and the student, and although Tillman did attempt to include adult learners in his model, he produced solutions that were only suitable for young fulltime traditional students.

Bean & Metzner (1985) and Garland (1993) produced more inclusive models. Bean & Metzner's work was concerned with non-traditional students and was based on the premise that their lives outside the university would be more important to them than life on campus. Garland's model dealt with distance learning adults and also concluded that, although many problems could be connected to the institute or the staff at the institute, outside influences were of great importance to the students. These two models show more resemblance to the research reported here than those discussed above, and indeed Bean & Metzner used a path model which assumed that some factors would be more important than others to students. So, for example, they drew an important direct path between the students' backgrounds and the likelihood of dropout (Fig. 2.2, p. 24). They also traced a direct effect from background factors through academic factors to academic outcomes; and from the student's background through the environmental factors such as support, family responsibilities and hours of employment to the psychological outcomes such as satisfaction, usefulness of the course and possible stress (Fig. 2.2, p.24). Bean & Metzner found no direct effects on dropout from social integration factors, contrary to the findings of Tinto and Tillman. However, no real effort was made to examine the factors intrinsic to students, probably because of the heterogeneous nature of these variables. The current research was able, by a preliminary investigation of these factors, to discover trends which might in future be developed into validated variables which could help to elucidate the phenomenon of persistence.

Garland (1993) looked at potential barriers for distance learning students, only one area of which was institutional. Within this category of factors was included both costs of course materials and of travelling to tutorials and also poor interaction with tutors. The latter was found to be important in the present research, the interaction between tutor and student being deemed to be very important both in the qualitative and quantitative research. One comment from a student in the qualitative study who had dropped out of his course

indicated that he didn't like to disturb tutors, and related an experience where he had felt unwelcome when he did telephone (Ch.5, p. 143). In the quantitative study, 82% of students found the feedback from their tutor helpful or very helpful, 60% found tutorials useful or very useful (and it should be remembered that there are very low turnouts at OUUK tutorials for a variety of reasons) and 66% found that their tutor was their main source of support (Table 8.12, p. 221).

Garland also identified poor support and overcommitment as potential barriers to persistence. Additionally, she included adult pride and the need for achievement and respect. As part of this group of factors, entitled 'Dispositional', she included psychological, social and economic factors, but no attempt was made to decide what these might be (Fig.2.3, p.27). In the results of the current study, these factors were all found to be particularly important to adult part-time learners.

Although the models of Bean & Metzner (1985) and Garland (1993) did acknowledge the importance of outside influences on part-time adult learners, and, in the case of the former, were able to trace a path showing how some of these could affect persistence, there was still no real interest in showing how these factors affected the adult students, nor how additionality of factors might affect persistence.

The models of Kember (1995) and MacKinnon-Slaney (1994) concentrated more on the external influences on distance learning students and part-time adult learners respectively. Kember, like Tinto, suggested that entry characteristics were important because they would affect the student's goal commitment. Kember's model drew heavily on Tinto's (1975) model, which may have resulted in his work appearing to be less innovative and the factor of entry characteristics not being thoroughly defined. He agreed with Tinto that entry characteristics of students could not be used to influence policy, although he had found in earlier work (Kember 1981) that there were, in fact, relationships between persistence and

demographic variables such as age, housing conditions or number of children. Although Kember undertook considerable qualitative research, he seemed not to use the results of this in his model as fully as he might have done. His major achievement was to build on the work of Knowles (1990) on andragogy and to recognise that mature adults had different learning needs and brought different skills to study. Kember recognised that adults' readiness to learn would in part depend upon their social roles and that their experience outside the institution should be used in problem-solving methodology. In the first part of his full model of student progress, he acknowledges that external influences, such as entry characteristics, insufficient time, unexpected events and distractions will affect external attribution and that family environment and study encouragement will increase social integration (Fig. 2.5, p. 31). In addition, he suggests that motivation, learning ability and evaluating the course positively will improve academic integration, which in turn will lead to persistence. In the present study, these factors were found to be important, although more work has been undertaken on these as part of the entry characteristics or characteristics developed as a result of study. In assessing the work of Kember, it was not thought that enough research into these factors had been undertaken to define reliably how they contributed to the major variables such as social integration or external attribution in his model of student progress. It was, for instance, found that although support was seminal to adult learners, there was no evidence that this had to come from the immediate family of the learner. Intrinsic motivation, placed with the factor of academic integration in Kember's model, was found to be perhaps more readily related to social integration than to academic integration. For instance, it was found in this study that students were motivated to believe they could continue, even if they should become ill, so an optimistic outlook was important as part of their intrinsic motivation, while Kember did not research factors such as these. Despite these differences, Kember's model seems to be more applicable to part-time adult learning and to consider more important factors than the other models considered so far in this section.

The last model to be considered, MacKinnon-Slaney's Adult Persistence in Learning Model (1994), examined more of the personal characteristics of the adult student than did any of the other models. This model was intended to be a guide for counsellors of adults returning to study and encompassed personal, environmental and learning issues. A major contention in this research was that each student was different and that individual differences might be identified through the use of the variables in the model. There is also a recognition that students will change and develop over the course of a programme of study, and, while this thesis is not refuted, it is contended in the study reported here, that adult learners need to approach their study equipped with certain intrinsic and extrinsic factors, such as support, a sense of optimism, an ability to cope with the management of learning and an assumption of tutor support. MacKinnon-Slaney identifies the student most likely to persist, almost in terms of the life-challenger, as: -

"In particular, a robust sense of self, a hardy academic self-concept, self-assurance in achievement situations, a healthy dose of achievement motivation and a certain degree of confidence in managing the bureaucracy must be present on a day to day basis."

(MacKinnon-Slaney 1994, p. 270)

The importance of this model to the present study is that it relies upon an examination of persistence rather than retention. In other words, MacKinnon-Slaney is explaining what she understands to be the characteristics of the persistent student and expects that counsellors will approach the new adult learners with this picture in mind. Retention will occur if the counsellors can ensure that the students with whom they deal possess all the necessary characteristics for success. While this model may seem to resemble the results reported in the present study, it does not take into account external factors that may either on their own overcome the student, or combine to ensure that the student, with the best will in the world, cannot continue with study. It is therefore essential to be aware that although an examination of student characteristics is seminal in the study reported here, external factors are still of vital importance in predicting persistence.

It may be concluded from re-examining the major characteristics of these six models that the current research, although placing emphasis on students characteristics on entry to adult learning experiences, needs to take into account, and identify, external circumstances that can affect student persistence, and some of these, such as lack of academic success, feeling that the tutor does not offer suitable support, or personal or family crises, will be factors that may overcome the most persistent student. If these external factors occur, then there may be intrinsic student characteristics that will still encourage persistence, but much further research will be required to identify these.

Suggestions for future research

Increased qualitative work would be the most important methodology which might help to refine the identified factors. By further examination of the results of the qualitative study completed here, and identification of the more important outcomes, the process of developing grounded theory could be continued with a second group of students. The results, in turn, might be refined and re-applied to a third group as suggested by Glaser and Strauss (1967). In such a large undertaking, it might be necessary to repeat this procedure with multiple groups of students. In this way, a reliable interview schedule could be identified, which would inform a valid questionnaire for quantitative investigation.

Within the quantitative methodology, it is also important that the current research strategy is examined to achieve increased validity and reliability. The factors identified for any model need to be statistically analysed individually to validate their use. It would also be possible to set up the data on an interval scale for further inferential testing, although this should perhaps only be considered after a multifactorial testing had been carried out.

There was a wealth of qualitative comments collected on the questionnaires, which have only occasionally been used. Students were given the opportunity to write brief comments for each statement and also encouraged to write up to half a page of their feelings and

thoughts at the end of the questionnaire. While much of the longer comments were specific to the Open University, the shorter comments were more likely to be broadly applicable to adult learners in general. This material could yield useful qualitative findings on the respondents' perceptions about learning, which, if combined with the interviews, would yield much more useful information about student characteristics.

It would also be possible for interested academics to carry out small scale action research with groups of students, by following some of the recommendations for institutions given below in the following section. While practitioner research has not always highly been regarded, it is a growing practice (Jarvis 1999) and can add much to the knowledge of the application of theory.

However, whatever may be considered in order to improve the design of the research, the main requirement is for the research to be repeated with other groups, by other researchers.

Only in this way can the findings reported here be validated and judged to be reliable.

Adults studying part-time in other institutions where the teaching methods are different from those of the Open University; adults who are attending college on a part-time basis at different levels and those who are studying in the workplace could all be studied for the intrinsic and extrinsic factors that will lead them to persist.

Recommendations for institutions offering adult part-time courses.

From the results of this research, it seems that it might be helpful for universities and colleges to consider that adult part-time learners may require specific types of support and that they are not a homogenous group of students. It appears that it may not be sufficient to offer a course to part-time adults that is a lengthened version of a more traditional fulltime programme for school leavers. There has been sufficient information for many years about the differences between adult and child learning to inform training for advisers

and teachers of adults (Jarvis 1981) and this might be usefully considered to facilitate adult learning.

This study indicates that support might be improved for adults by proactive contact from lecturers. It would be helpful if study advisers considered using pre-course contact to begin the process of ascertaining the type of support that students can expect from their family and friends. In this way vulnerable students might be identified, offered institutional support and encouraged to make the most of contact with other students. For these vulnerable learners, regular contact from institutional staff, until it is certain that they are being supported elsewhere, or have gained some confidence, would provide the support required. It is probable that the actual support would be optimised if provided either by academic staff or by study advisers who are qualified in educational counselling for adults.

The data has shown that it is important for staff to be aware that women may be less confident and need support and confirmation of their ability from a greater variety of people, which includes their tutors and the administrative side of the institution. Evidence from this research shows that inadequate advice for students who contact the institution will not help them to persist. It would be helpful if Course Advisers were made aware that adults who join part-time degree courses may not have a clear vision of their life goals and therefore for adult part-time study, study options should be kept as open as possible for as long as is feasibly cost-effective. To maximise goal setting, students would benefit from annual one-to-one discussions with a designated adviser or tutor who could assess their motivation and personal progress.

Persistence may be encouraged by pre-course tutorial support on learning skills. Early intervention by academic staff who are trained to teach reflective and strategic learning will maximise chances of persistence. These have been specifically called 'learning skills' as 'study skills' are commonly taught, even incorporated in distance learning courses as

separate study texts. It might be remembered that C, in the qualitative study, came close to dropping out, simply because of the multitude of media he was expected to consult within a unit of learning. These results also indicate that academic units can perhaps fail to realise the way in which adults study: which is anywhere; for short periods of time; early and late; and not, for most, sitting down for a morning or an afternoon (p. 215). An approach to learning is an individual choice which might be better informed by being discussed with a knowledgeable academic or counsellor.

Although little can be done to divert personal illness and crises for students, the effects of these trauma may be mitigated by an understanding institution. Strategies could perhaps be in place to ensure that the best possible advice and help is given to students in these situations. Support might include allowing students to defer their courses, with credit for assignment scores already gained (if these are used in the final assessment) or allowing deferral of submissions and examinations for any period of time over the academic year. In many universities, there are re-sit examinations for students, in which adults could be accommodated. These strategies would require the collaboration of examination departments and boards. In particular crises, senior academic staff might even discuss allowing students to define their own study parameters and demonstrate their learning in alternative ways.

Universities might benefit from a consideration of these recommendations which could result in greater numbers of persisting students and thus the accrual of extra fees, which might be used for staff development of advisers, counsellors and tutors. This, in turn, could increase the numbers of persistent students in the institution and the number of adults seeking entry to higher education.

Conclusion

The research in this study has produced, not a finished model of persistence for adult learners, but enough evidence to say with reasonable certainty that many of the factors which have been identified will have an effect on the persistence of adult learners.

It has also shown clearly that, unlike many previous models of persistence, it is important to investigate the entry characteristics of part-time adult learners, which will encompass social and environmental factors, traumatic factors and intrinsic factors. By identifying these factors, it will be possible to discover the students who may be vulnerable to dropping out of courses and resources can be allocated to supporting these students, rather than assuming that all students are in equal need of help.

The recommendations listed above depend only upon the more important findings from this research; further research could produce results that would lead to increased knowledge of student persistence. If more can be found out about why and how adult part-time learners are drawn to, and stay with, higher level study; more attention will be paid to, and extra value placed upon, part-time courses by institutions offering higher education. This, in turn, will result in a growth of the acceptability of lifetime learning for a larger percentage of the population and an understanding of the support needed for individuals for whom study is only one of their roles in life.

This research in this thesis, although requiring further work to validate and replicate the conclusions, represents a new approach to the study of adult students and the factors that affect their persistence. It is hoped that continuing research will be undertaken which will concentrate upon the persistence of students and consider part-time adult learners as proactive individuals who have to make many choices amongst their multiple roles and are affected by many factors, some of which will always be outside the control of higher education institutions.

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Appendices

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Appendix 1

Interview schedule for qualitative study

Interview questionnaire - A, B, C and D

1. Can we go back to your early education? What can you remember about primary and secondary school?
(if necessary, probe for negative/positive feelings; peer attitudes; relationship with parents; parents' employment, especially mother's)
2. What sort of child were you?
(if necessary, probe for indications of persistence, hardiness, conformity, social skills, leadership, control of situations).
Ask specifically at what age respondent began to feel responsible for own decisions
3. When did you leave school? What sort of career did you have in mind when you left?
(if early leaver (16), why? if necessary, probe for evidence of peer pressure; did friends leave at the same time)
4. Tell me about any courses that you have taken since you left school.
(Look for reasons for learning if not given - where respondent thought the benefit would be etc)
5. Can you tell me a bit about your family life now?
(Who lives with respondent; partner's work; ages of children; respondent's employment outside home; leisure interests etc. distribution of housework etc)
6. Why did you choose to study with the OU?
7. What was the biggest adjustment you had to make when you started studying with the OU?
(Probe for how respondent dealt with this)
8. What sorts of obstacles and/or constraints did you come up against when you were studying with the OU?
(Probe for how respondent dealt with these)
9. How did you fit your studying in?
(look for evidence of involving others; 'invisibility', compromise etc)
10. Did this cause any kind of stress?
(look/probe for how stress was dealt with)
11. What were the hardest bits? The easiest bits?
(look for coping skills and organisational skills)

12. What is/was your overall impression of being an OU student?
(probe for how it changed respondent's life)
13. Who has given you support? - Out of all the people who knew you were studying?
(Probe for partner, manager if not mentioned, children, friends; student group, tutor; look for type of support)
14. What personal qualities do you think contributed to your success?
(look for persistence etc)
15. What do you think individuals need to be able to succeed in the OU?
(look for support, time, compromise etc)
16. Have you any goals or objectives for the next five years?
(look for long-term planning)
17. What else do you hope to study in the future?
(look for evidence of goalsetting)
18. Can you think of any critical incident - something that affected you, either at work or in any other part of your life - that happened in the last year. Something that you don't mind telling me about! How did you deal with it?

Interview questionnaire - E, F,G and H

1. Can we go back to your early education? What can you remember about primary and secondary school?
(if necessary, probe for negative/positive feelings; peer attitudes; relationship with parents; parents' employment, especially mother's)
2. What sort of child were you?
(if necessary, probe for indications of persistence, hardiness, conformity, social skills, leadership, control of situations).
Ask specifically at what age respondent began to feel responsible for own decisions
3. When did you leave school? What sort of career did you have in mind when you left?
(if early leaver (16), why? if necessary, probe for evidence of peer pressure; did friends leave at the same time)
4. Tell me about any courses that you have taken since you left school.
(Look for reasons for learning if not given - where respondent thought the benefit would be etc)
5. Can you tell me a bit about your family life now?
(Who lives with respondent; partner's work; ages of children; respondent's employment outside home; leisure interests etc. distribution of housework etc)
6. Why did you choose to study with the OU?
7. What was the biggest change in your life that you had to make when you started studying with the OU?
(Probe for how respondent dealt with this)
8. What sorts of obstacles and/or constraints did you come up against when you were studying with the OU?
(Probe for how respondent dealt with these)
9. How did you fit your studying in?
(look for evidence of involving others; 'invisibility', compromise etc)
10. Did this cause any kind of stress? How did you deal with this?
(look/probe for how stress was dealt with)
11. What were the hardest bits? The easiest bits?
(look for coping skills and organisational skills)

12. What is/was your overall impression of being an OU student?
(probe for how it changed respondent's life)
13. Who has given you support? - Out of all the people who knew you were studying?
(Probe for partner, manager if not mentioned, children, friends; student group, tutor, look for type of support)
14. Tell me about deciding to withdraw from the course?
(probe for reasons other than work and home responsibilities eg - inability to manage time etc.)
15. What personal qualities do you think individuals need to be able to succeed in the OU?
(look for support, time, compromise etc).
16. How would you describe yourself in terms of those qualities?
17. Have you any goals or objectives for the next five years?
(look for long-term planning)
18. What else do you hope to study in the future?
(look for evidence of goalsetting)
19. Can you think of any critical incident - something that affected you, either at work or in any other part of your life - that happened in the last year. Something that you don't mind telling me about! How did you deal with it?

Interview questionnaire - J, K, L and M

1. Can we go back to your early education? What can you remember about primary and secondary school?
(if necessary, probe for negative/positive feelings; peer attitudes; relationship with parents; parents' employment, especially mother's)
2. What sort of child were you?
(if necessary, probe for indications of persistence, hardiness, conformity, social skills, leadership, control of situations).
Ask specifically at what age respondent began to feel responsible for own decisions
3. When did you leave school? What sort of career did you have in mind when you left?
(if early leaver (16), why? if necessary, probe for evidence of peer pressure; did friends leave at the same time)
4. Tell me about any courses that you have taken since you left school.
(Look for reasons for learning if not given - where respondent thought the benefit would be etc)
5. Can you tell me a bit about your family life now?
(Who lives with respondent; partner's work; ages of children; respondent's employment outside home; leisure interests etc. distribution of housework etc)
6. What were your reasons for applying to study with the OU in the first place?
7. What was the biggest change in your life that you had to make when you started studying with the OU?
(Probe for how respondent dealt with this)
8. What sorts of obstacles and/or constraints did you come up against when you were studying with the OU?
(Probe for how respondent dealt with these)
9. How did you fit your studying in?
(look for evidence of involving others; 'invisibility', compromise etc)
10. Did this cause any stress? How did you feel about this?
(look/probe for how stress was dealt with)
11. What were the hardest bits? The easiest bits?
(look for coping skills and organisational skills)

12. What is/was your overall impression of being an OU student?
(probe for how it changed respondent's life)
13. Who gave you support? - Out of all the people who knew you were studying?
(Probe for partner, manager if not mentioned, children, friends, student group, tutor, look for type of support)
14. Tell me about deciding to withdraw from the course?
(probe for reasons other than work and home responsibilities eg - inability to manage time etc.)
15. What do you think individuals need to be able to succeed in the OU?
(look for support, time, compromise etc)
16. How would you describe yourself in terms of those qualities?
17. Have you any goals or objectives for the next five years?
(look for long-term planning)
18. What else do you hope to study in the future?
(look for evidence of goalsetting)
19. Can you think of any critical incident - something that affected you, either at work or in any other part of your life - that happened in the last year. Something that you don't mind telling me about! How did you deal with it?

Appendix 2

Respondent notes and reflective account

Respondent notes and *reflective account*

first year students who succeeded

A is 26, and works as a paramedic - eg - ambulance driver. Lives with girlfriend in a small terrace house, which is beautifully decorated in modern 'Ikea' style - could easily be featured in a 'Homes' magazine - right down to the mauve artificial gerberas in the brushed aluminium vase at the foot of the stairs. The house is not, however, decorated in a self-conscious manner but very welcoming and comfortable. They have two cats.

Says he is casual and laid back, but is quite fidgety in non-verbal communication at the start which seems to be more to do with the interview process than worrying about what he should say to me. Speaks quite quickly and is very articulate. A young man, who seems to know that he is going somewhere and that a degree is the first step. However, he is not very sure where he is going at the moment. He is also optimistic and enthusiastic in his manner. His motivation is quite instrumental - having a degree is the important thing. I noted that his mother seemed to have been the more powerful parent and now he takes his girlfriend's advice. He is getting to the point of strategic learning, but I would suggest that he has a lot of growing up to do still - certainly before he becomes a life-challenger

This was my first interview and it was an easy start as A was very responsive and spoke freely on a variety of subjects. The hardest thing was not to move into 'Adviser' mode with him about his courses etc. I thought he was extraordinarily frank and would probably have talked about anything I had asked him. I was glad I recorded the interview as it would be easy to be biased towards such a pleasant young man.

B is in her early to mid forties and works as a teacher in the local comprehensive school. She has a particular interest in pastoral care and is doing her second Counselling course this year as well as her second OU course. Married to the Principal of a primary school in Belfast, and has three children, two boys aged 15 and 11 and a girl aged 6. We did the interview in her conservatory, which turned out to be somewhat of a mistake because the acoustics were difficult. Lives in a nice bungalow, furnished in traditional style.

Very confident and pleasant - was anxious that she shouldn't be identified in the final report - very on-the-ball about what she said, she understood what she meant as well as what she actually said. Says she is a very private person, but was happy to discuss fairly private aspects of her life with me. Generally a very 'grounded' person, mature, a patient mother and has an equal sharing relationship negotiated with her husband. She is a teacher through and through with a particular care for the underclass students, and a desire to give them an opportunity to succeed. I was slightly surprised to hear that her trip to summer school was the first time she had been away from home on her own and that she missed her family and didn't really want to go. Despite this, she thoroughly enjoyed the week.

I admired B as well - she enjoyed talking about her own schooldays, those of her children and her own job. I didn't feel the need to provide her with any direction - she knows well where she is going and intends to get there. She has paced herself, with a late child, she doesn't want to take on a more senior job at present. While she might run the risk of being too old to make real progress when her youngest child is more independent, her personality and confidence should help her to get a job.

second and subsequent year students who succeeded

C is 36, married with two girls, aged 8 and 6. He is a Carer, his wife has epilepsy, which is poorly controlled. They live on benefit. He has been studying with the OU for 10 years - Computer Studies - and has only 60 points to complete before ending up with what looks like being a First. Loves learning for its own sake. After completing his degree, intends to do another first degree in pure Maths. May then go on to a Higher degree. Spent a lot of the interview fulminating about the previous year's course, which he hated. Otherwise he loves the OU.

Plays in a band which is about his only leisure interest, as he has most of the responsibility for the children - has to do all the driving. They live in a new semi-detached bungalow on a rather nice private housing estate and he seemed pleased to discuss the OU endlessly - claimed to like the flexibility but maintains telephone contact with other students. He's happy with his role and the learning he's doing - fairly centred and mature.

I liked C - he doesn't make much fuss about what is essentially a fairly cramped life, with little freedom to go and look for a job. He is a computer whiz-kid, who could easily get a job too. Because he was 'made' to take a wrong turn at school, and may even feel sorry that he let his mother down here, he is trying to make up for lost time.

D is in her early thirties and a beautiful young woman. She works in the police force and is divorced. She lives alone in a modern, minimalist and attractive flat, and she immediately offers coffee. Charming and articulate, she is athletic and I would guess, physically very strong. She settled herself as far away from me as she could and I had to ask her to come nearer! Generally, she seems confident, although she admits that this is hard-won, as she lost a lot of confidence when her marriage broke up. Her manner is calm, clear and collected and she was very forthcoming. She has a new 'boyfriend' - her term, not mine

I've never seen such an attractive policewoman- and she was so candid - in Northern Ireland that isn't always the case - why did she trust me? Other than that I was from the Open University, she knew nothing about my political persuasion - which might be important in Northern Ireland. She was very trusting - which is a bit of a responsibility! I have been surprised that these students are so willing to reveal themselves to a complete stranger.

first year students who withdrew

E is 23 and withdrew from S103 in his first year. He is very quiet - almost inaudible on the tape and doesn't talk very much. He lives in one of the more deprived areas in West Belfast, that is, I interviewed him in his father's house, but although the estate (council estate) is fairly new, most of the people living there are unemployed. He has a flat attached to the hospital where he works. He is not really very confident, but wants to get a third level qualification and do a job that he likes at the end of it. I think he will succeed, he did very well for the first half of last year. He seems to be fuelled by a huge determination to make the best of a second chance at education - he is very bitter about his first go at secondary education. He hasn't got much confidence as yet - just determination. He was a FAF student (financial assistance) when he started as he was unemployed at the time, but is prepared to pay in 2000, when he will start again. His non-verbal behaviour was calm and low-key.

He is the youngest interviewee and was so monosyllabic a lot of the time that he really rattled me into talking far too much. However, much of what I say is repeating his last sentence for the recorder, as I knew he would be hard to hear. He was rather frightened of the microphone, so I didn't move it closer to him in case he stopped altogether. It was really sad listening to his story, he feels totally responsible for his parents' wellbeing, despite having two brothers and a sister. When I asked him about not telling anyone about his OU work, he was afraid of being laughed at. However, he became quite animated as he described how he would ring up his siblings on the morning of his graduation and tell them to be at the Waterfront Hall at 2.30 pm and surprise them. He did tell his mother that he was studying, but she failed to understand what he was saying and thought he should get a proper job - which he has.

F is in her early thirties and was the angriest and most hostile person in the sample. Not with me, or even with the Open University, but with life in general. She doesn't like herself and doesn't like many other folk either. She lives in a ground floor apartment on her own with her cat. There was no mention of any male company at any stage. From her conversation, it really seemed to be failing the 11+ that began this bitterness. The room contained an exercise bike, some expensive stereo equipment and a handsome TV and video, too big for the room. She doesn't use the bike, and never watches videos. Her non-verbal behaviour was agitated and abrupt. Although she was welcoming to me, I think that she is desperately lonely.

This girl is so unhappy. Studying with the OU can't have helped her self-esteem either, although she rationalised her dropping out. I didn't really believe her and I'm not sure that she believed it either. I felt like leaping into counselling mode and had to restrain myself. She is a perfect example of Friedman's hostile personality - poor girl is never going to be happy! Her self-esteem is very low, unnecessarily, as she has a job as a senior accountant in the Civil Service as her parents paid for her to go to grammar school and university. She never failed anything again, but still is patterned by an early setback.

second or subsequent year students who withdrew formally

G is the oldest student, and although he had dropped out in the previous year, he already had an OU degree. He is a very wealthy builder living in a traditionally - and expensively furnished bungalow and a good example of someone who has climbed from a relatively deprived background to a middle class position of respectability. He lives with his wife - children have left home and married - he is a grandfather. He is a supporter of the Open University, but is unlikely to return as he is involved with a charity in the West Indies which necessitates his being away from home for months at a time. He is semi-retired - his sons run the business, and is still rather surprised that he is a graduate. There is a very large graduation picture of him on the wall. His behaviour was slightly defensive, as if he wasn't sure that he was as good as I was. Considering he left school very early, he has done very well academically and is justifiably proud of this, but would not like to do a higher degree

He was the person who was most scared of the recorder - it took quite a while before he relaxed, and I felt that he was on his guard most of the time. It was only when we got half-way through the interview that he became less guarded. He was the only interviewee who kept a (psychological) distance between us - despite the fact that he was extremely polite and pleasant. This may reflect his attitudes - he is a member of a somewhat didactic and fundamentalist church - so I have to be careful that I don't interpret him unfairly!

H is in her late twenties and is a prison officer. Although she didn't tell me this, it was fairly easy to work out from what she did say. She is married - for the second time - to another prison officer and was the first interviewee to draw my attention to the phenomenon of being absorbed by the pleasure of learning. She is studying the course that she transferred from last year, and hopes to finish this year. She lives in a small house on a private estate - it is homely and attractive without being over-decorated. She possesses two dogs, one of which is a Doberman. She had to introduce them to me to avoid my being eaten! She was enthusiastic and keen about the OU, but somewhat restless throughout the interview. The style of her responses - lots of false starts etc. seemed to show that she was thinking about all this for the first time.

She just loves learning - anything - she is the sort who reads the backs of everybody else's papers on the train. But she has had a very traumatic few years, divorce, miscarriages etc. so she needs to succeed. I think she will, but I also think that her priorities are husband and family rather than study at this stage of her life, so I would imagine she might take a long time to get a degree. She is in a similar situation to D, but does not have the self-confidence to challenge life. She gets frightened easily - of TMAs, of her parents-in-law and even, possibly, of her husband, although there is absolutely no evidence that he would want her to be. There is a vague life-plan, but unstructured.

first year students who withdrew without notifying the university

M is a 27 year old who is heavily involved in a project in Londonderry that supports a youth club with empowerment as its central tenet. He runs this project and I interviewed him in his office at the club. He is remarkable in that he grew up in an area embittered by the troubles, but describes an open-minded attitude to life and a desire to help the youth in the town. He has been married to a long-term partner for eighteen months and they have a five year old son who will be encouraged to work hard at school and go to university. Has a radical approach to young people in that he is prepared to trust them and work with them to achieve a service for young unemployed people. He was sure about where he is going in his work, and was particularly keen on learning, but perhaps not with a very clear idea of where he wants to end up. His manner was confident, though he was possibly not suited to distance learning - is now attending the local university to do another part-time course. A good example of someone who was set to go to university and didn't.

Another person with a lot to offer - and doing something that isn't being replicated anywhere else. It's not the sort of thing that would be approved of by most social workers - far too much participation by the clients!! His wife is a successful business woman - perhaps too successful for him. Since his mother died, he finds it difficult to concentrate, but I imagine that the reality may be that he needs the constant stimulation of a peer group. Little hardiness here. I'm sorry to say.

J is a young single mother - late twenties. She lives in a little house (public housing) on the dreariest and most run-down estate I have seen - in a 'new' town that has never really worked as a town. She has made a real effort to decorate her house - using the Latin flowing script wallpaper borders and cushion covers that were so popular last year in the home magazines. She has fresh flowers and real coffee - sitting in her living room you wouldn't know that the rest of the estate was outside. She lives on benefits - her daughter is at school and she is eager to support her in her schoolwork - saying that she (the daughter) wouldn't be like she was! She was very keen to talk to me, and very friendly. she expressed her determination to return to the OU or do some other sort of course that

would give her a qualification to work with children. She does have friends and family living not too far away, but they are not able to support her in her learning and she can't get hold of babysitters on a regular basis. She is very young in her manner, obviously devoted to her daughter and determined to make something of her life. I didn't get the impression that she was particularly interested in learning for its own sake, more for what it can do for her. She was fidgety - not because she was frightened, more because she wanted to tell me everything in a way that I would understand. She enjoyed having someone to talk to, she may well be lonely.

How many people are there out there struggling to do their best for their families? I do wish Peter Lilley and/or Norman Tebbit could have been with me on these interviews. they might realise that help and support was what was needed, not further opprobrium. It hasn't struck the government that perhaps single mothers need help at nights, not just in the daytime. I think that J needs help before she gets ground down into dull acceptance. Actually I think she is too 'young' for the Open University, she would be better at the local Tech. where she can meet other young people. She is a very long way from maturity, but it could be her circumstances that hold her back rather than her characteristics.

second or subsequent year students who withdrew without notifying the university

K is a middle aged man absolutely besotted by learning of every sort. I got the distinct impression that he had never been very sure where he was going. He had been in the army for a while, then tried the priesthood, and although he was too canny to tell me, I would guess that he was currently employed by the TA in a civilian capacity. His withdrawal was due to illness and he was back studying in 1999. He was willing to talk about anything under the sun, but with no particular focus - it was obvious that all his life experiences hadn't really produced any kind of career that he was devoted to. He has vague dreams of becoming an expert on what are probably Cathars in southern France, but it's debatable whether he will be sufficiently motivated to get organised to do that. He lived in a small terraced house on a public housing estate. The house was comfortable and nicely decorated in a traditional manner. The small sitting room was a bit like a minefield, with Coalport figurines everywhere, quite frightening when you are trailing a cassette recorder and microphone around with you. He loved to talk - expound rather - but perhaps is aware that he hasn't made a complete 'success' of his life. His non-verbal behaviour was outwardly relaxed - loved the recorder - but I felt there was tension there - though it may have been to do with his job.

I had had to bully him slightly on the phone to get him to agree to be interviewed - well perhaps coaxed would be a better way of expressing it! But he certainly was welcoming and wanted to talk - got the impression that nobody else wants to listen to him - certainly not his wife, who has not interest in education. A rather sad man, in many ways. No apparent focus to his studies or his life and yet a good brain. He will either leap into action and become an 'expert' or just give up. He may just continue to study and do degrees for the love of it.

L is a woman in her mid to late forties with eight children from 5 to 22. She lived in a Victorian semi in a nice area of Belfast. The house was cosy and pleasant, but not a show house - a house for living in comfortably. Her husband is a technician, so they can't have much spare cash. Six children are still living at home. She was delighted to talk about herself and her studies - she has managed to use her OU studies to win a place at teacher training college with considerable credit exemption. She has always wanted to work with small children, and has steadily worked towards achieving this, while bringing up her

family, through illness and a not-very-supportive husband. She was quite on guard at first, but as she had 'done this kind of thing in her OU course', she settled down and thought how useful it would have been to have been interviewed before she had had to interview others! She gave the impression of someone who wanted something, but did not have the means or resources to go for it assertively initially. At this stage she was more sure because she could see her way more clearly.

I thought she must have the patience of a saint - her husband may have been jealous - he had dropped out of a psychology course at UU which she had taken in her stride in the OU. He certainly didn't attempt to help or support her, and this may have blunted her drive to get on and get qualified. I got the impression that she had had enough of being the household slave and now was determined to get on - her youngest had just started school, and she was beginning to see her way out of the morass of childcare/housework. She fiddled a lot with her hands and torn fringes on the chair - I was hard put to it not to tell her to stop that - it was probably how the tear had happened in the first place. She was definitely feeling guilty about doing the OU - may have felt she was taking resources away from the family. However, she owes a lot to her mother-in-law, who has supported her throughout her studies, letting her come and stay at her house overnight to revise for exams. Her own family members are non-committal about her efforts. Although she was quiet, she will succeed - she is a very hardy woman.

Overall impressions

- 1 *We have some amazing students - endlessly interesting and if I were taking a psychological approach to this it would be even more fascinating*
- 2 *It was hard to get past the interpersonal relationships to be really scientific about the interviewees - a good reason for recording and transcribing, and also for having someone else who wasn't there to take a cold hard look at the outcomes rather than just the process. I was very sure that I was biased by these respondents - there wasn't one that I didn't like and respect and it was difficult to credit them with any but the best of intentions!*
- 3 *Having said that, I think there were definite pluses to being the interviewer as well as the researcher. I learned a lot about what they meant as well as what they said. Their non-verbal communication sometimes belied their words when twisting hands accompanied an apparently assured sentence, and the cassette couldn't capture their smiles, or the eye-contact or lack of it. Obviously these are my interpretations, but they colour the transcripts, and hopefully the second analysis will correct any extreme bias.*
- 4 *The process threw up some anomalies. One of the students who had withdrawn had, in fact, already completed a degree - this was an unrelated course for interest. Another who had apparently 'disappeared' during the second or subsequent year of study had actually finished her degree. She was sufficiently unsure of herself to enrol for a course that she subsequently didn't need, so dropped out at the start. She had earlier dropped out of a course, so was still a 'legitimate' respondent*
- 5 *If I have to interview again, I will not do it without lapel microphones - the transcription was a nightmare. Despite having tested for sound at the beginning, the tapes were very difficult and slow. I failed to realise that when testing - which I always did at the start of the interview, everyone speaks up nice and clearly, but*

once the recording process is under way, people revert to their usual mumble and also speak more quickly.

- 6 *It was difficult to draw conclusions from the process - as opposed to the outcomes, but I would say that the persisters were those who seemed to be focused on their goals - who were able to give me answers when I had asked the questions, who were able to articulate a clear plan for their lives, who were relaxed and confident about themselves and knew who they were. The attitudes towards education may have been important - although there didn't seem to be anything significant in their talking about their early education - except for E who loathed school - the only time he was emphatic during the interview, and F who didn't remember much about school except that she had failed the 11+, which had devastated her. I didn't try to analyse the interviews through in-depth pattern coding - there were only twelve in total and they were in fact all single cases. The process was also very flexible - rather than sticking rigidly to the questionnaire, I tended to follow a factor when it appeared and worry it until I was sure that I had got as much as possible from it. so for example, with F, I wondered how much her failure of the 11+ had actually affected her OU study and the rest of her life. It appeared that it had been seminal, causing her to dread failing any examination. A more psychoanalytical approach could well have identified her need to punish herself for that early failure by suffering and also to avoid repeating that failure by persisting with a course with which she couldn't come to terms. For this process it was enough to discover that the effect was important to her.*
- 7 *Even before I completed the analysis and summaries, I was struck by the differences between the respondents in their approach to learning. This was not just the way in which they studied, but their attitude towards the courses. Some saw study as part of their life-plan, some as a means to an end - but they weren't sure what that end might be - and some really didn't know why they were studying. It was a sharp reminder that measuring characteristics must be a snapshot in time and that very many things can happen outside of the Open University that will change people for better or worse. So perhaps the best lesson to be learned from this exercise is that most people grow and develop and that testing the presence of any characteristic will almost certainly produce results with a large central tendency as learners use their study (whether wittingly or unwittingly) to help them progress.*

Appendix 3

Complete annotated interview with 'D'

Interview with D – second or subsequent year female student who was successful

R Well I first of all want to go back to your early education. What can you remember about primary and secondary school?

D. Primary school, ehm, went to two grammar schools, the first one, for about two years, was in Lisburn, the second one where I completed my eleven plus, ehm, was in the country, it was rural, basically there were two classrooms, [R. mhm], and I was always like the swot - a swotty child [R chuckles] but, um, got chased by the hooligans on the way home from school. Ah, so I got my eleven plus but I didn't go to grammar school, ehm, I went to secondary school, or a comprehensive school at that stage. And I always was in the top stream, with top marks, [R. mhm] and got 10 O levels and then I went and did A levels and got three good A levels [R. mhm] ehm, and that stage I became, I applied for nursing and I then decided to go to university so I did and pursued, ehm, a degree, although at the time that my A level results came out, they came out considerably better than I had anticipated [R mhm], and, ah, I went through this real frenzy in and around the beginning of August of that year wondering whether or not I should have gone to university and I actually could have went to university on the grades that I had because they were quite good and, but I decided that I'd chosen Nursing and stuck with it and I suppose I later found that that wasn't the course for me.

EE2 - doesn't specifically mention library school here

SEEA 2 - opportunity for 'good' education

R. Right. You really liked school then, {you enjoyed it when you were there?}

D. {Yeah} Yeah, I did quite like school, erm, it wasn't, you know there were quite good sports as well as the academic side of things, I probably would have been more, slightly more arty and sub-science [R. mhm] than pure Maths or pure Sciences but, em, I mean my subjects would reflect sciences, sub-sciences, and, em, I suppose English.

EE2

? recreation?

R. Right. Uhm, what about your, your parents? What sort, did they want you to be in any particular career, how did they{D. "No, em"} How did they encourage you or....?

D. It's strange, my parents and I, my parents would be working class people, ehm, they left school at 16 and they, they really didn't put pressure on me. Ehm, I think they expected me to do well, if, it was myself and my brother and if anybody was expected to do well, it would have been me, and I was just basically left to get on and get on with works, do work, make grade, and, ehm, the only time I can ever remember them saying they were disappointed was when I had a bad report in around third form and that was just because I was talking too much and having too good a time to myself [R. chuckles].

PA 1

SEEA - 2

PA 1 unsure of parents' attitude?

perhaps less than able to support her academically

- R. What about your brother? Then was he not expected to be academic [R. laughs].
- D. He, he just, he's a different sort of person, you know, homework was always a chore to him, you know, instead of coming in and getting homework done, getting it out of the way and then going out to play, he was the opposite, he decided that he wanted to go out and then the homework was left until, maybe eight o'clock and there was always tears and, he just wasn't academic really. It's strange because he's actually started Open University this year because I've been encouraging him to do something, something more positive, so he's started this year, ehm, but, eh, it's quite strange because I've spoken to my mother, you know, since he started Open University, and at the time I think, you know, I felt that because they were working class that I would have to put them through another three or four years of supporting me, and I felt, actually quite reluctant to do that, albeit I was what, only 18 at the time. And it's strange because I've spoken to her recently, especially when I've had exams and things and she's saying "look" she nearly wishes now that I had went through it then because it would have been so much easier to do a degree, ehm, full-time degree when you're 18 - 22 or 23 or whatever [R. mm] as opposed to trying to do it now, but, you know, they're actually quite supportive now for doing it, so....
- R. But they were particularly interested earlier on [D. "No"], in your necessarily doing a degree?
- D. I think they left it to my..., they were very much, they were interested but I chose Nursing. In fact, my father, at the time, tried to talk me out of Nursing, and from what I can remember he nearly encouraged to do something else [R. mm] and he didn't think that Nursing was good enough for me, and he thought that he could, or for the intelligence that I had that I really should have been doing something a bit more. But I still felt that I didn't want to impose on anybody for another 3 or 4 years. [R. Yep] Maybe if we'd talked about it more...
- R. Yes I suppose so....
- D. ...it might have made a difference.
- R. Yeah, uhuh. - What did your father work at?
- D. My father was a lorry driver, so..... and my mother was a Secretary, so, ehm, I mean both of them, I mean, they're smart in their way, in their own way, and they were very knowledgeable of worldly issues, especially my father but, ehm, they never went on after 16...ehm...I suppose perhaps maybe if they had done it maybe I would have been more encouraged to do it.
- PA2 - evidence of checking homework
- SEEA-2 felt unwilling to financially burden parents
- PA2 - perhaps mother feels she should have encouraged her more
- PA2 - father ignored
- MP3 - made up own mind - took decisions at 18
- SEEA - feels that parents' lack of education influenced her

R. Yeah, maybe so. Did your mother work while you were small?

D. Yeah, she always worked. She worked from basically when we returned to school, when I went school, when my brother started school, she returned to work and she worked basically 9 to 3, school hours and then as we got older she worked a bit longer at times. But she worked literally about 150 metres from where we lived so, at, at times you know, we could spend time at her work or she could come in and out to the house, so it was quite, she wasn't that far away. *xx - mother worked part-time*

R. Mm, yeah, handy. What sort of child were you? You said you were a swot, what else? [laughs]

D. Actually quite a shy child, confident in ways, in that I knew, ehm, that I was top of the class and, ah, I wasn't afraid to ask questions, if I didn't understand something I would have said so, and perhaps being teacher's pet, in inverted commas, made that easier because you weren't going to be bawled out, but, ehm, in ways quite shy, and self-conscious, I was always quite tall which meant that, ehm, I always felt somewhat different in a way, but ehm, and then even my choice of secondary school made me different because the area that we lived in, we lived in a small development of private houses and near us there were two large council estates and because I didn't go to the local, really rough comprehensive, I chose to go to another school, approximately 20 miles away, which was a very, very good school, I was looked at as the snob and the swot and suppose ostracised in a way, so although I was very happy at that school and I'm always glad I made that choice to go to that school at 11. *ACC 2 early evidence of confidence SC3 decision making at 11 EE3 - first mention of happiness at school*

R. You made {it...?}

D. {I made that} choice, yeah, I mean my Mum had looked at all the schools in the area and she basically had said, you know, I can remember talking about "well, where did I really want to go to?" and it was this school and she thought it was a good school, and it was a good school. And, uh, so because of that that's what, we could put that down as a primary influence. I would say that I was actually quite a self-conscious, ahm, child, yeah. *SC3 confident enough to choose a school AL3 where her friends were not going to be*

R. Did you have a lot of friends then, or were...?

D. Ehm, I'm trying to think really. Yes, I always had, em, friends, I would have had, em, two or three friends that would have been good friends and, em, and probably would have had a group of good friends, em, but I wouldn't, I actually was probably quite strong-willed, my mother said I wasn't a particularly affectionate child, because I can remember having this discussion that we never really hugged too much, there was never a lot of open affection in our family. And once she *H2 reasonably happy with own company - but made friends quite easily*

was saying it was because I was so independent and so strong-minded and strong-willed and did my own thing, and apparently I didn't really want hugs and things like that. And I wasn't the sort of girl who liked to play with dolls, I was into racing on bikes and scrapping(?) and [R. "Right" chuckles] and sports and things like that so, em...

H3 early decision
LC3 & control of
where she was going
and who she was

R. Well, you've in a way answered the next area, which was, ehm, when did you leave school and what sort of career did you have in mind, you did that, you went right up and did you're A levels. What about your friends, did they do the same sort of thing, or did they...?

D. No, I, I probably, when I left primary school, I cut all ties really with the people that I knew at primary school because I went to a different secondary school, and when I went to secondary school I had a lot of, quite good group of friends and probably four of us, six of us in particular all went about as a group of boys and girls [R. mhm]. We got to fifth form and my cousin was at the same school and her and I always would have been together, in the same classes maybe for everything, the same grades, ehm, she flunked her O levels, she got bored and I got 10 basically so I went and did A levels whereas, it's quite strange because out of that group of six there were probably only the two of us, three of us went to do A levels and the other girl went to a different school and went to this school in Lisburn. [R. hm] So, ehm, although, I mean, my cousin and I are still good friends, I lost contact with those people and then obviously developed friends when I went to grammar school, I was changing to the grammar school for two years to do A levels [R. "Oh yeah" mhm] which I feel was, at that point, that's when I developed a lot of confidence, not a lot of confidence but, developed a great deal more confidence, ahm, and belief possibly in myself then.

ALG3 - not
influenced by
friends at 11

ALG - another
break and a
choice of school
uninfluenced
by peers

SC3 - ? made
all these choices
without much
self-confidence?

R. At grammar school?

D. Yes.

R. More so than {at comprehensive}?

D. {Because of that? yeah} Well, I always was, because I was always in the top grades and the top stream, I seemed to cruise through secondary school, it wasn't a big effort, and as long as I was prepared some work, well I was always guaranteed that I would have got As or 80% or maybe would have been up there and certainly from my, I mean I didn't particularly do well in my mocks but I pulled out the stops and did really well on the actual exams, em, but it was probably personally my own, my character changed quite a bit between O levels to A levels because I was the only girl from our school who went to that particular grammar school so I was forced to go into a situation and then pick up and try form friendships, try and

SS3

AL3 - strategic
approach - does
what is needed

ACC3 - little
problem with
this

form, em, sort of new friendships with new people, em, new teachers, and I feel that I certainly developed confidence, I wasn't afraid, again, - because, perhaps because I did really well at O levels, I mean, that gave me the confidence, because I know at the time, when I went to grammar school, it was a boarding, it was part of a, it was a boarding school, and em, and I can remember a guy saying to me "Oh Karen, how many O levels did you get?" and he thought that I was one of those country bumpkins who had just got the minimum five or four and had just got into grammar school and, you know, he said and I said "I got 10 Paul" and I knew that he hadn't done particularly well and I can remember saying "How did you get yourself?" and he said "Oh, well four" and he was really.., and to be honest I just sort of thought "well I'm just as good as he is, he has more money and he has more, em, I suppose standing financially as it was at that stage but I was determined that that wasn't going to maybe hold me.., I was very much aware of class structure, that, that brought me into contact with that and then I, I sort of realised well a lot of hard work is going to be needed to get me through, and I did it, but I mean again I did really well in my A levels as well and I proved to a lot of people in my year, oh you know, I was quite popular and I was captain of the netball team but I was sporty and was good at netball and at that stage I was training for, em, under 21 at Northern Ireland level so I was an asset to the school, so that gave me confidence as well to just, "well I don't understand this I'll ask because that's what teachers are paid to do" [slight laugh].

RP - can look at her development and work out how this happened

SEEK - aware of financial differences MP3 - determined to show them!

ACC3 - needed to prove herself to those in the school? Was there a feeling of lack of resource here

PLC3 - sense that she can be responsible for herself

PLH3

R. Quite mature really, and quite...

D. Bloody obstreperous. [R. and D. laugh]

R. Did you ,uh, finish your nurse training?

D. Yes, I finished it and, um, I was a general nurse for three years afterwards, so I trained for three years and I staffed for three years.

R. Why did you leave?

D. Totally, well when I say it's the wrong decision, um, I think probably through my training I knew that nursing wasn't totally for me but because I'd started it I thought "I can't really pack it in" because I didn't really know what else to go to even at that stage, and at that stage I didn't really know, I couldn't, to me I didn't see the way in going back to university [R. mhm, "yeah"] and, you know, a year and half behind my peer group or two years behind my peer group so, because I'd started it and established a life there, and I'd established friends and got a flat and, ehm, all those things, eh, I finished it, and I can remember when I finished it, we didn't get jobs, and, eh, I had to go to Brighton, and I lived in Brighton for

MP2 - realised she had made wrong decision - not able to change

PLH - I now needing some maturity?

about two months, and I went with six girls and after about two weeks there was nobody left but myself and another girl and then she left after about four weeks, so, I remained there for another while, and I would have remained, you know, I came home for a holiday and I actually got a job here but it didn't deter me, I sort of thought "well, it doesn't matter where you go, you'll always get on with things", so, ehm, but I always knew, I think floating in the back of mind, I always knew it wasn't really the career for me [R. mm], and with cutbacks and you were constantly, there was more and more responsibility being given to you and you're expected to do more and more work for nothing, and you, we used to work until a quarter to nine, frequently if I was in charge, I wasn't get off until a quarter to ten, and that was just expected, you were there for an hour extra maybe one or twice a week, we were never paid, it was completely unrewarding system and, em, there were a lot of all those push factors just ends up with us, I was too much of a rebel for that, em, institution as well, and I sort of saw the wrongs in a lot of things and that [R. chuckles] that didn't go down well.

SC2 - seems to be
ACC2 confident,
but took a while
to make up mind
to leave nursing

rationalising
choices

R. Before your present job did you do any other courses of any sort? Did you study anything else?

D. A counselling course.

R. A counselling course?

D. Yeah, I did a counselling course at Queen's while I was still nursing [R. mhm] and that was, that was helpful

R. OK and you made the right choice of career the second time, did you?

D. I believe so, em, I probably think I'm better at this job than I would have been, than I was at nursing, em, but again, it's a large institution, and, ahm, it's a male dominated role so you have to, em, you always have to push, you know, whatever you do you don't just have to be good at it, you have to be very good at it and that those ideas probably, to some extent, still exist, em, I certainly have given counterparts a run for their money and I think certainly studying will bring that up again because to get promotion and to get on I think you definitely need third level education.

MP3 } happy to
CS3 } make
whatever effort is
required
PLT3 - making
herself a career

R. Right, OK. What about your family life here?

D. Em, well, I am divorced, I was actually studying in the throes of divorce [laughs] which maybe wasn't a good idea but, em, it was, again, I sort of look at my life and have been very, I can attribute the person I am now to large changes in my life, like I said before like I went to a different school to do A levels and that, but, em, I'm divorced and I live here in an apartment in

AS3 - divorce
CL3 - more
change - again
apparently taken
in stride

Belfast by myself, em, I work basically 40 hours at least a week and um, I never have free time particularly, eh, I either am studying for Open University or I would have a lot of work with regards to my professional life, em, so I could end up having to do a lot of work for that even sometimes at home and I would train, em, I would go to the gym maybe three or four times a week and I'm a very social person, em, I do have a boyfriend, em and he gets fitted in, but he's, he's done third level education as well by(?) working so he's very understanding in that way.

CSL-2 - says her life is busy, but seems to make time for everything she wants to do

R. So basically he and the Open University are your leisure interests, you might say now?

D. Well, he, the Open University, training, squeezing in a social life.

CSL3 - sounds as if she fits most things in

R. Right, no wonder you have to do your housework all in one fell swoop [R. & D. laugh]. So why did you choose to study with the OU particularly?

D. Em, well basically, I had looked at a lot of third level courses and, in relation to my job, em, there is, there are particular third level courses which would be, em, which would be very particular let's say, or specific to that type of work, em, however that, my job as a police officer is, it's undergoing a lot of change at the moment and there will be a lot of change in the next 10 to 15 years, of which I'm not sure what's going to happen, so I didn't see the point, and I didn't want to do a job-related degree and I'm actually quite interested in social studies and, em, that, that's the next, that's the thing that I would be interested in so I thought if I did a degree in that, well, first of all, the Open University let me do two years and I could have left after two years with a diploma, so I thought "well, I'll give it a go just for two years and see how it goes, and at least I'll have a diploma if I really don't want to go, if I really hate it, then I'll only have to do two years" and, em, then after two years well I stuck at it and done it for four years so, it's like a finger in another pie, it's another option, it helps me in my job if I have third level education, it also gives me, em, an opening if perhaps I change careers in another ten years.

PLM2 - looking to the future but unsure of what it might be
AL3 - feels nice learning is important

R. Right, mm. What was the biggest adjustment you had to make when you started studying with the OU?

D. Probably time, just trying to, em, well, allocating time on a regular basis which doesn't always happen, em, you always set out with the greatest of intentions, that you will set yourself aside so much time per week, now it doesn't always happen and that used to panic the hell out of me, I used to think "oh my goodness, I mean, I've fallen way behind", and you know but then I realised that third level education is balancing

OTM2 - knows about time allocation, but initially didn't use it well

everything, and you don't want to hear this but it's just balancing, em, what time you can allocate to study and what time you allocate to work and sometimes one takes precedence over the other but being able to be flexible, so - and the second thing that I probably had to adjust to was, I wasn't always going to get 80%. [R. laughs] But it doesn't matter, you know, I mean I used to think, I can remember getting 49% on an essay and I thought, I was devastated, I thought "this is it, I'm never, I am finishing this course and I am never doing another course afterwards", and I thought this was dreadful, I had never got 49% in my life over anything, but it was still a pass and I started, actually after that I realised, you know, it's not, it is third level, I am working, if I can 80% it's lovely, if I can get a year of 80% or 70% that's fabulous, but on some occasions, because of time, because of other constraints I don't, but you, know, you just accept the rough with the smooth and, maybe sometimes you just have to lower your, em, goals slightly.

AL3 - strategic approach worked out
OTM3 - better management later

O2 - picked up quickly here
CS3 worked out has some terms with third level education

R. It happens to a lot of smart schoolchildren when they get to third level[laughs]

D. Indeed.

R. What sorts of obstacles were there? What sorts of constraints were there? Are there in your studying, apart from time? Is there anything else that gets in the way or...?

D. Work. My work's very irregular at times. [R. Right, OK.] And at times I really cannot give any time over to it especially at different times of the year. The other thing would be the summer schools, em, and basically, it can be no problem but I still had to get excused last year, but, I don't really know that there's any great obstacles.

WS2/3

O3 } able to
CS3 } overcome problems & be optimistic about studies

R. Right, OK. And when you fitting your studying in, did you do that all by yourself? Did anybody help?

D. No, I would have organised it myself basically. I study with somebody else [R. "oh"] sorry, I should have said that. In my first year when I started Open University, my first year I trudged through it and when I got to the end and, to be perfectly honest I hadn't went to a lot of the classes, I'd done a level 2 course first of all and didn't really go along to the classes because I was working a lot of Saturdays and it came to the exam, and I was coming up to the exam and I thought I'd go to this class and I actually met a fellow in the class who worked in the same job as myself and we set up a study group, just the two of us and another guy so we blasted for three weeks for the exams and we actually did quite well in the exams and him and I have both studied together ever since and we've done the same courses so if there's anything that I'm not sure about or any help, I would phone him up and see if he

SOS

SOS3 working with single student all the time

has any ideas or we would organise to meet and do maybe a wee study plan together or... [R. right] so that's been good.

R. It's been helpful?

D. It's been very, very helpful and I don't know that it would have been just as easy, em, had I not had somebody else, definitely somebody else there is ***.

SOS3 - really appreciates support

R. Would you feel that that makes up for not being able to attend the tutorials?

D. Oh yeah, definitely, I mean this year I wasn't able to attend my first tutorial, so the two things I did was phone my tutor who, I feel, she's very good this year, I think a lot depends sometimes on your tutor. This year I think I'll probably get on OK with her, she seemed to be very enthusiastic, she was very, very helpful, she talked about a few things on the phone for half an hour and then the fellow Sam that I study with, he went to the tutorial, took notes, em, so I got those now, and he was able to run over a few bits and pieces for the last TMA which was quite helpful so....

ST2 feels that a lot may depend on ST3 - appreciates support
SOS3 - does depend upon student support

R. Right, when you started off did you feel stressed by any of that?

D. Yes.

AS - stressed starting study

R. And how do you feel about that?

D. Em, ignore it sometimes, no, em, just as I say the first time I was at it I used to think "oh my goodness, I've to do 14 hours a week for this and I have to be reading and, ah, I need to all of this work to get it done for, ehm, the TMAs but to be perfectly honest I spoke to somebody who was a few years ahead of me, and, em, he gave me advice, again you may not like to hear, but it's, you can do half the course well, very well, or you can do the full course half well and you can still pass the exam and get a pretty good mark, so when I started to look at it that way I used to think "right, OK" and I looked, where I had time, I could generally look at months that I'm going to be busy and months that I'm not going to be busy so ehm, I usually quieter, em, the first 3 or 4 months, and particularly busy generally then from July to September as a result of work, July to September as a result of work and then obviously the exam in October, so I usually try and do the first half very well [R. mhm] and then the other ones I pick and choose, you have to choose what you're going to do so, yes, it was stressful but I probably spoke to that person who'd been through a bit and then spoke to the person with the most time.

AS2 - stressed starting study

AL3 - developed a strategic approach to study

OTH3 - now able to organise for the year

AS1 - less stressful after leaving home to learn

R. It's commoner than you would think [laughs]. What, what were the hardest bits of starting to study?

D. Em, - - - making sure was, you were doing everything, em, discipline [R. yeah], I think it was a certain amount of discipline, making sure that you did do the work, and then, the only thing is your first few TMAs you just, you don't know what the level, you don't know where you're pitching, you don't know, em, is this what I'm supposed to be at or is this way off track or, em, you really are fumbling about in the dark that way until you've done a few assessments, em, and probably trying to get into essay writing again. There's a certain skill in essay writing and developing that again at this level [R. mhm] I would say is, to some extent, difficult.

AL-2 about worries at start of course

ACC3 - can face challenge of being 1st year & realise the control given to you

R. Mm. So what was the easiest bit?

D. Emm, I don't know. But I wouldn't say it's been overly easy, em, but it's been rewarding so it's nice when you're sitting on Christmas Eve and you get your results [R. chuckles] and you've passed and that, that's nice you know, so you think "oh that wasn't too bad", you look back and you think it wasn't too bad so all the stress and you know everything was worth it, so,....I don't know. I think, it takes work, it isn't an easy thing and I think you just have to persevere and if you're required to put in a few hours, you'll get there.

D3 - can forget stress or rationalise it

R. Mhm. Do you like what you're learning - the subjects?

D. Yes. Yes I do, em, I think probably that is to some extent helpful, I couldn't - people - my job would be law-related and people would say to me "do a course in law", "do a degree in law" and I'm thinking "no way", you know, I just wouldn't be into it, it would be a real chore and I know people who have started law degrees and they've, they've chucked it in after a year because they really aren't that interested, whereas social studies is very, eh, very, to me it's very interesting so I enjoy it.

ZZ enjoys learning this subject

R. What's your overall impression of being an OU student?

D. Of course there's always the idea that you pay for your degree, isn't there? [laughs] You know some people would take that attitude, em, but actually it probably hasn't put up my views on things, em, because you meet such a broad spectrum of people and if you go to the classes, which I have done since the first year I've realised the importance of classes and I really do try to get to most of them, but let me see, I suppose being in time for it - what was the question, I forgot to answer you?

AL - strategic again - does what she considers to be important

R. What's your overall impression, em, of being an OU student? I mean, how has it changed your life? How, do you feel any different since you started studying?

D. I probably feel better versed on certain issues, certain issues, and I'm more aware because of the course probably everything's around me em, because it is, it's social studies against the background of Ireland and our society, so you actually do look at things and think "that's exactly what I did 2 years ago" or, so that way, you know, it's quite a workable degree, em, because I think it is a confidence building measure too in that, em, beforehand, I'm not any more intelligent now than I ever was when I did A levels or when I was a nurse or when I commenced this job but, em, I often felt, because I didn't have a degree education, even though I knew that I could have completed it and had a degree, no problem, you know, if I'd left 18 or 19 and done a degree then, that wasn't the issue, I always felt that I wasn't educated to their level or standard so I always felt slightly inferior to people who had degrees. It didn't matter that their degrees were in something quite unworkable or that they hadn't done particularly well in them but I always felt slightly inferior academically [R. mm] and yet there was the other part of my mind saying "Wise up Karen, you are smart and you are intelligent and, you know, very much how other people take you" but it's given me the confidence to realise "Well here I'm am and I'm going to be degree education, or degree-educated as well".

ESG - feelings of inferiority with colleagues/peers
SSI - is important to succeed in confidence

PLT2 - determined to get degree

R. Or more maybe. So, support, who's given you support while you've been doing this...any sort of support - practical, emotional, just whatever, whatever?

D. My boyfriend's actually very good, I think that's, he, after 2 years, I was thinking "oh god, I'm never going to do it, it's another four years" and he was very much "For heavens' (?) sake, just go and do it, you know you're going to regret it" and I knew I was going to regret it because when I first thought of taking a degree, em, it was while I was married the last time and wouldn't have had, I really wouldn't have got the same support from that person and, yet, when I actually came round to commencing my degree I thought "I started thinking about this 3 years ago, if I'd done it then, I would be half way through", I'd be finished now, so you actually realise that it's not that long, 6 years isn't a long time so, and that was what he, he certainly looks at it this way "it's not a long time, just do it, it's what you want to do, now get through it", so he's very supportive which is good. My parents are actually, my mother in particular, she's very supportive, she's quite good, I can talk to her on the phone, eh, and the guy that I study with and I think definitely the tutor, your tutor can mean a lot, I've had four years, I've had, let me see, 2 really good tutors, well, this is my fourth year so I can't really say three years, so I've had 2 really, 1 excellent tutor, that was my first year, she was brilliant and she was just magnificent to listen to, she was really supportive and she just, I can remember being in a real tizzy about an assessed assignment basically, and I knew it wasn't going to be in and got in a real frenzy about it, and she

SPC3

SPC3

PA3 - parent of support
XX - support from mother

ST3 - tutor excellent

was brilliant, she just sorted it and sat me down and I got the essay done and I got a really good mark and, the second year I would say my tutor and myself weren't, as I would say, on the same wavelength which I always felt was a wee bit more difficult although he was a good tutor and he was very interested. Last year I had a very good tutor as well, again, I think if you're on the same wavelength and the same ideas to a certain extent as your tutor it is easier, you know, because you automatically latch into thoughts and theories, I think, quicker but, em, but I don't know what this year's, this year's seems to be OK so far.

ST2 differentiates
ST3 of tutors

R. What personal qualities do you think contributed to your success?

D. Oh, I don't like starting something and not finishing it. I'm not a great finisher, you know, with the fine detail, I mean I don't like fine detail, but, em, if I start something I like to finish it and I'm determined to finish it and it would be just this sense of failing if I didn't finish it that would be a failure, that would be failing and I don't like to fail. [R. right] and that's, that's probably the overwhelming thing, it would be such a failure, a personal failure for me if I didn't finish it.

PSS 2 despite
MP 3 apparent
SS 3 confidence
ACC 3 fear of failure

R. Individuals in general, what do you think they need to succeed? Anything else apart from determination to finish it, what else would you need...?

D. A bit of organisation, I think you just have to, a bit of organisation and not being afraid to ask questions and ask for help, you know what I mean, you're a student, you not supposed to, you're not supposed to know it all and, if things are a bit unclear, you don't know what you're doing, you need, there are people there to provide you with help, but you have to ask for it, and you have to take more control.

OTM 2
CS 3 strategy -
OTM 3 help

R. Right. Have you any, so far, have you any goals or objectives say for the next, say, 5 years?

D. Finish this degree, that's the first thing, and then, to be honest, after that I really don't know. There's a part of me sort of feels like going doing painting with water-colours or pottery or....[R chuckles]....something nice and, nice and light, but I don't know, I'll finish the degree so that's the first part.

ALG 2 - no
long term goals
perhaps because
of work stress
& requirements

R. Yeah. But you haven't thought about whether you would like to study in the future...just to the end of your degree?

D. Yeah, I mean I'll study my degree and then I also will probably will - at the same time that I'm finishing the degree I know I'll be studying in work as well for the next level so I know that the next few years could be very jam-packed and that I could be studying for this year's course until October,

WS 3 - lots of
pressure but
exams in work

and then from October to February studying for exams in work and then starting again with my fifth year [R. right, OK]. So that's, it's very short-term but I have to get through the next two years. [R. yeah, right]

WS3 - stops
has been looking
too far ahead?

R. Em, now this is something which, again, I don't necessarily want you to think of work. Em, I want you to see if you can think of any sort of critical incident that affected you - either at work or in any other part of your life that happened in the last year, now something that you want to talk about, not something particularly private. Can you think of any examples that you could talk about? If you can't, say so, but, um...any particular change or...?

D. Not from last year.

R. No?

D. No.

R. How do you cope with change when it does arise?

D. Em, change doesn't frighten me particularly, I've been through loads of change and, em, like I said, em, I, I, I take the attitude "well things work themselves out and there's no point in worrying about things that you can't change", if you can change it for the better then get on do something about it, do something if you can think of it, confront and do something and I would, if change has come along, that's what I would generally do and, you know, I suppose I just take the attitude...I don't panic over change because it can be quite a positive, em, thing, so I suppose I just, I confront change, if change comes along I confront it and look at it, if it's positive and it's going to work for me well then I'll take it on board, but if it's not well then I'll sort of look at it and say "well in what ways could it be positive?" or, and if I have to actually take on a change because it's bigger than I am well then you're going to have to maybe adopt a different lifestyle or certainly different attitudes to things so change isn't - in some ways it can be a very positive thing, I mean I came through the change of divorce, let's say, you know that's a big change, and to me it was completely positive change, I was really glad - at the time when I was going through it, I didn't think that at all, I thought it was dreadful but now, I sort of think it's the best thing that happened to me because it really made me look at things and decide "what way are you going?" and what do you want to do, so I think you can look at it positively or negatively [R. mhm] and if you look at it positively most things work out OK, and if you look at it negatively, em, then you're just on a downward track really, and you're only here once so you don't have time for that, so.....

ACC 3 challenge
if possible

CS3 face the
challenge
H2 head down
& come through
positively

RP2 forced to
look at her life
& plan for future

END OF INTERVIEW.

Appendix 4

Analysis summary for 'D'

Interview with D			Analysis summary	Social and environmental factors
Factor	Inferential coding	Comment		
EE	3	Enjoyed school very much - did A levels, was sporty, aware of cultural differences at A-level school		
PA	1	Not particularly encouraging, possibly because they had little education themselves - mother now a supporter OU study		
CSL	2	Says she has no free time, but seems to fit a lot in, including a social life and boyfriend		
CF	2	Not really applicable, - she is divorced - there would have been some conflict with ex-husband		
ESG	2	Boyfriend supports her as does a friend		
JR	3	Claims to be always busy. Has to juggle with work and study and boyfriend/social life/housework		
SEEA	2	Went to grammar school/QUB. Initially qualified as a nurse. Parents had little education and little money		
SOS	3	Has made friends with one student with whom she works every year - he is important to her study		
SF	1	Only her boyfriend supports her.		
ST	3	Gets lots of support from tutors, goes to tutorials if at all possible. Says some are better than others		
SPC	3	Her boyfriend supports her - and her mother now gives her support,		
SW	1	All police are expected to study and it is therefore normal for her to be learning		
XX	2	Her mother worked part-time. Mother supports her studying now.		

Interview with D			Analysis summary	Traumatic factors
Factor	Inferential coding	Comment		
CL	3	Lots of changes - divorce - change of careers - changes of schools - all chosen by her		
CFC	0	None		
II	1	Has not had any problems, except a tutor who wasn't as helpful as he might have been		
FC	1	Divorce, but she is very positive about the outcomes of that		
FS	3	Not a problem - she may be partly financed by work, but will be well paid		
WS	-1	Lots - sometimes threatening her study - she has to plan carefully		
AS	2	Talks about the stress of starting to study - has a need to succeed and a fear of failure		
PSS	3	Very competent in running her life and keeping all the balls in the air. Depends on herself.		
PH	3	Physically very fit		
AT	3	Sees these as challenges and tackles them head on.		
SS	3	Has always been successful - needs to be. A 49% grade devastated her		
CS	3	Works it out for herself - doesn't ask anyone		
YY	-1	Claims to have a trauma-free life now! Has coped with divorce, job stress, study stress etc. Has job stress sporadically		

Interview with D			Analysis summary	Intrinsic factors
Factor	Inferential coding	Comment		
MP	3	Persisted with nursing knowing it wasn't right. Knows she has to push in a male-dominated profession - will do it.		
ILC	3	In control of where she's at and where she's going. There's a lingering fear of failure.		
AL	3	Began by adopting a deep approach, switched to a strategic approach after advice from an 'old hand'.		
CLA	3	Commitment to go further in career and be better at her job, but aware that she might need to change jobs		
ALG	2	Doesn't go further than getting her degree, probably because she has to study at work as well and it's enough		
ACC	3	Sees challenges which can be met, it's up to her to meet these.		
SC	3	Has self-confidence, though there's not really a recognition of this		
O	3	Optimistic - knows she will do well if she tries. Is happy with her achievements so far		
OTM	3	Excellent time management and organisational skills - which she really needs in her life		
H	2	She is hardy, with a small problem with fear of failure. Perhaps to do with her divorce?		
RP	3	Can examine her development and work out how it happened and what she needs to do.		
PLM	3	She is in charge of her life and sees a coherent plan of progressing in front of her		
ZL	3	Is clear that study requires self-discipline re time and organisation. Students must enjoy learning. May be sanguine.		

Appendix 5

Confirmation of the cross-analysis of the qualitative study



The Open University in Ireland

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Rosemary K Hamilton BSc PhD CBE
Director

Ref: PJ/cok

10 March 2000

Mrs M J Castles
9 Holywood Road
Newtownards
Co Down
BT23 4TQ

Dear Jane

I am writing, with the return of your research papers, to confirm what I did and my views. Let me say at the start that I am impressed by the conscientious thoroughness with which you have pursued your research to date. The documentation was extremely helpful to me in my task as well as being a necessary part of the early stage of the research process. Perhaps I should also admit, at the outset, that I found my task quite difficult; I think mainly because I simply am not fully conversant with the concepts involved and in particular, with the 'key concept' of hardiness. Yes; I read the Literature Review! quite thoroughly; and I followed the development of your argument to the point of hardiness. I could understand it and I found your argument convincing. It was the operationalisation that I found more difficult, especially at first. However, I would say that I thought I was improving as I went along! So, where have I been?

I started my task by carefully reading your Literature Review, as noted above. It is thorough and well-argued. I certainly recognise it as a Literature Review in the context of a Ph.D. I read also the Methodology and was comfortable with the fact of the Pilot, the categories, selection, etc. I then tackled each of the Interview transcriptions except E which I did not find included in its complete form. I tried the audio-tape but found difficulty in actually hearing it in sufficient detail so I am afraid I defaulted there. I listened to short extracts from several of the tapes in a casually random selection, to get a flavour of what had occurred – of 'what' it was like'. I feel satisfied that the pilot was carried out carefully and satisfactorily. Whilst there may be instances where, if taken out of context, it might be suggested that "the witness was being led" I do not, in fact, believe that this has been the case. I am satisfied that the points were of clarification and not fabrication.

I appreciate that I was not intended to 'analyse' the interviews as such but I found that, in order to 'verify' the research (which I believed to be my task) and make suggestions (if any) for improvement, I needed to try to work the model and use the criteria. As noted above, I did find it difficult and this left me asking myself "why?" I believe it is not because I am not capable of carrying out the task! Rather, that I am not adequately versed in social and health psychology and, perhaps to my surprise, I

was not initially very good at working with the more abstract concepts. That these are necessarily abstract, due to their nature (and I would admit to knowing that concepts are abstractions!) also make me question my own activities as a practitioner in adult education! But enough of that. The 'good news' is that as I was completing my task I was feeling more comfortable with using the ideas of hardiness, persistence, locus of control than I was at the start. This suggests to me, not so much that I can learn new tasks! but that the concepts are capable of being operationalised. What I did wonder was whether, in the development and refinement of the model, the concepts/criteria could be clustered and possibly, even, some peripheralised. This suggests (to me) some kind of hierarchy of concepts. For example; does it matter where Support comes from? is it more significant that it is there, in some form?

During the proceedings I did wonder (mainly in the earlier stages) whether age and what I would have learned as 'life-cycle stage' should not be incorporated. There may well be a more modern interpretation of what I knew as 'life-cycle stage' because it was, I realise, based on conventional notions of 'family'. However, I began to appreciate that there were individuals who achieved differently but shared, not only age and life-cycle but also, other circumstances. This, then, points again towards notions of 'hardiness'.

Finally, I allowed myself to read your analysis that you provided in a sealed envelope. I did not go so far as to compare my ideas with yours: that is for you to do if you wish. I found your material to be clearly discussed and I found no problems with the outcome. In asking myself, lastly, why do OU students succeed? ---- I think I was concluding that it had to do with motivation, determination --- with hardiness as well as (some) support (though no doubt we find individuals who succeed with no support at all) and helped by reasonable social-economic and environmental circumstances.

You will find, in the red folder, the results of my deliberations. I used the set of three diagrams and employed the somewhat unsophisticated method of + (plus) and - (minus) neutral' or X /, - (dash, meaning neutral and X meaning no or not present, / meaning yes or present). I have added descriptive or explanatory comments in some cases.

I hope you find this useful and that what I have done approximates sufficiently to what you intended. I found it interesting and thought-provoking. I will, for a while anyway, be more careful in pontificating about how students cope, succeed, withdraw. But I remain impressed and humbled by how they do so! I believe also that your research is of a high standard and will make a significant contribution, not only to our knowledge but also to our work in adult education.

Yours sincerely

Dr Pat Jess
Staff Tutor – Social Science

Appendix 6

**Letter and questionnaire for
the quantitative research**

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3 April 2001

Dear Student

Rosemary K Hamilton BSc PhD CBE
Director

I am writing to ask for your help in gathering information that could help us to offer a better service to Open University students.

As you will already know, studying with the university through supported distance learning is not an easy option and we are always very conscious of the perseverance and determination of our students. It is therefore very important to us to keep our students and help them to do well.

I am currently engaged in research that aims to find out what extra help we might be able to give to students. To do this, I need to find out from students themselves what factors affect their ability to enjoy and profit from their studies. From the research already done and some interviews with students, it has been possible to find out what the most important factors might be that help students to succeed. The next step is to do a larger postal survey which will hopefully identify the types of extra help that would improve life for our students.

I would be very grateful indeed if you would complete and return the enclosed questionnaire in the stamped addressed envelope as soon as it is convenient for you to do so and preferably within a week. Although it may seem like an extra chore for already busy people, it will be a huge help to both me and the university - in fact, without your help, we cannot make recommendations about further support for students! The questionnaire may seem long, but I have included a lot of explanation about the items, so I think you will find it quick to complete and - hopefully - interesting. If you have any concerns about it, please do ring me at the Belfast office.

Your answers will be completely confidential - I will be the only person who will be able to identify you - nobody else will ever know your identity. The number on the questionnaire is purely so that I will know whether you have replied and won't bother you with follow-up enquiries.

If you would like a copy of the results of this survey, please let me know - you can write 'copy of results' on the top of the questionnaire.

I do hope you will be able to help me in this - your response will be very valuable to the university.

Yours truly

Jane Castles
Staff Tutor

BEST COPY

AVAILABLE

TEXT IN ORIGINAL IS
CLOSE TO THE EDGE OF
THE PAGE

Questionnaire for Open University students - April 2001

you know, completing this questionnaire will allow me to find out more about ways of supporting Open University students. I am very grateful indeed for your help with this - thank you for taking the time to complete the form. There are four pages in all - printed back-to-back, so you will need to turn over each of the two sheets.

Questions about support

We try to support our students as well as possible. Many students also receive support from their family and friends and we would like to find out about this. Support may mean encouragement, academic help or practical help with time and family - whatever you would define as support that helps you.

Before you started studying with the university, did you get encouragement from any of the following?
(Tick all that apply)

- partner/spouse ☐
- parent ☐
- sister/brother ☐
- friend ☐
- work colleague ☐
- didn't tell anyone ☐
- other (please write in)

Since you have been studying, have you received support from any of the following? (Tick all that apply).

- partner/spouse ☐
- parent ☐
- sister/brother ☐
- friend ☐
- work colleague ☐
- other students ☐
- didn't tell anyone ☐
- other (please write in)

Questions on your feelings about your study.

You may have mixed feelings about this - so you can tick more than one option. Remember that your identity will be kept secret so you can really tell me how you feel!

Are you doing the course(s) you are doing because: -
(Tick all that apply)

- you want to get a job? ☐
- you enjoy study? ☐
- you want promotion? ☐
- it will keep your brain active? ☐
- you want to change jobs? ☐
- you really like the course(s)? ☐
- other (please write in)

Now that you are partway into your course, do you: -
(Tick all that apply)

- feel you are succeeding? ☐
- think you might be a bit behind? ☐
- feel in control of your learning? ☐
- think your grades are reasonably good? ☐
- feel you won't have time to do it all? ☐

When you were at primary school were you: -

- happy to be there most of the time ☐
- unhappy to be there most of the time ☐

When you were at secondary school were you: -

- happy to be there most of the time ☐
- unhappy to be there most of the time ☐

Questions on your experiences while studying with the Open University.

These questions take the form of a rating scale - that is to say, you are being asked to indicate how much or how little you agree with a number of statements. Please only tick one category. I've left some space for comments, if you want to explain your response.

	strongly agree	agree	not certain	disagree	strongly disagree	Comments
My tutor(s) feedback is usually very helpful and I can learn from it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I haven't needed to cut any of my leisure activities to make time for my study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Life has changed because it often means that things are going to get better	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
It is not necessary to consult with anyone else about my study problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I am becoming better at knowing what to do and what not to bother with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Advice from the regional office isn't particularly useful in helping me make decisions about my courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
My tutor gives helpful tutorials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I don't think that I am usually responsible for things that happen to me in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I have asked my family/friends to take over some of my chores when I am studying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I am not really sure who to contact if I have a practical problem with my studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I consider my tutor(s) to be my main support in my studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I often think that life makes too many senseless demands on me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I have had as much as it takes to get good assignment grades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
I think if you ignore problems they will often go away	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
My life is going reasonably well and I am managing my studies quite well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

	strongly agree	agree	uncertain	disagree	strongly disagree	Comments
It's hard to make connections between the topic and the next in my course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I have a problem, usually I solve it myself, but sometimes I need to ask for help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The first things I look for when I start a new unit or book are the aims or outcomes and the TMA requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm uncertain about choosing and preparing for the next course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm very lucky because I have most of what I need to make progress in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It can be hard to find time to study - I have to study at odd times and sometimes only for short periods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like to contact my tutor at the start of the course so that I can get to know him/her and what might be expected of me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm not sure that I can really influence things that happen to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like to study when nobody is around - sometimes this means very early or late at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To be successful, you have to learn most of the materials in the course books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I have a problem, I try to think of a lot of possible solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm not sure that I am committed to making real plans for my future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's important to find out what the tutor expects and give it to her/him	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If one of my family was ill for a time, I probably want to leave the course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had any sort of crisis at work or at home, I'd still try to finish my course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for persevering with that long list of items! This page has some final simple questions for you about yourself. These are necessary because they may reflect differences between the support needed by different students - everybody is not the same! All of the answers are necessary, so I'd really like you to complete them. The information will be kept entirely confidential.

Are you: -
(Please tick)

Male? ☐
Female? ☐

Are you: -
(Please tick the answer that applies)

In your first year with the Open University? ☐
In your 2nd or 3rd year? ☐
In your 4th or later year(s)? ☐

When you joined the university, was your
previous highest educational qualification: -

A-level equivalent and/or above? ☐
O-level or equivalent? ☐
No previous qualifications? ☐
Other (please write in) _____

Please tick the age band you come into: -

65 and over ☐
50-64 ☐
40-49 ☐
30-39 ☐
25-29 ☐
under 25 ☐

If you were ill, would you: -

try to continue studying? ☐
stop studying immediately to get better? ☐
leave the course hoping to return next year? ☐

Thank you very much indeed for taking the time to complete this - if you feel there is anything else you would like to say, or anything that I haven't asked you about, please use the rest of this page to tell me about it. Remember that you will not be identified in any way.

Appendix 7

Construction of independent variables for the quantitative study

Construction of independent variables for the quantitative study

There were twelve independent variables which made up the factors in the preliminary model. Throughout the coding missing values were coded as 9. There were five variables based upon a simple Yes or No response. These were: -

Independent variable

Support

Using item 2 in the questionnaire, for which there were 6 categories of support and 1 category that included 'didn't tell anyone' (no support). This was coded simply as 1= yes, 2= no for all categories.

Early educational experience

Using item 4 in the questionnaire, which was divided between primary and secondary school and for each division, respondents could choose 'happy most of the time' or 'unhappy most of the time'. All four possibilities were separately coded. 1=yes, 2=no.

Success in study

Using item 4 in the questionnaire, which gave five choices, two of which ('think you might be a bit behind' and 'feel you won't have time to do it all') were assumed to mean that the student felt unsuccessful and the other three ('feel you are succeeding', 'feel in control of your learning' and 'think your grades are reasonably good') were assumed to mean that the student felt successful. Coding was divided into 'feels successful' =1 (includes three options chosen) 'does not feel successful' =2 (includes two options chosen) and any other combination of options = 3

Love of learning

Using item 3 in the questionnaire, which gave 7 options in response to the question 'Are you doing the course(s) you are doing because...'; it was assumed that students who chose the three options of 'you enjoy study', 'it will keep your brain active' and 'you really like the course' loved learning (=1). It was also assumed that those who did not choose any of these options did not love learning (=2). Any other combination of options = 3.

Good physical health

Using item 11 in the questionnaire, which asked 'If you were ill, would you: -'
try to continue studying?

stop studying immediately to get better?

leave the course hoping to return next year?

It was assumed that the response 'try to continue studying' (=1) meant that the respondents believed that they had good health and would be able to stay on the course if ill. It was also assumed that the response 'stop studying immediately to get better' (=2) meant that the students believed that they would have to leave the course if they became ill. The response 'leave the course hoping to return next year' (=3) was assumed to mean that the students were unsure about what they would do if they became ill and were uncertain about their ability to continue study.

The remaining 7 model variables were composed from the Likert scale of 30 statements which was item 6 in the questionnaire. Each of these had five possible responses; strongly agree, agree, not certain, disagree and strongly disagree. All were coded from 1 to 5, with a score of 5 always contributing most to persistence within the factor. So for example, in the statement 'I am very lucky because I have most of what I need to make progress in my life', strongly agree scored 5 and in the statement 'I am not sure that I can really influence things that happen to me' strongly disagreed scored 5.

In item 6, the Likert scale, the following statements scored 5 for the response 'strongly agree': - Nos 1, 3, 5, 7, 9, 11, 13, 15, 17, 18, 20, 21, 22, 24, 26, 28, 30. The following statements scored 5 for the response 'strongly disagree': - Nos 2, 4, 6, 8, 10, 12, 14, 16, 19, 23, 25, 27, 29,

Because the five point scale was collapsed to a three point scale, respondents could score either 4 or 5 to meet the criteria for the factor. The scores therefore depended upon the number of statements in the factor. With 5 statements the maximum score was 25, with 7 statements, the maximum was 35. However, respondents who scored 20 on a 5 statement factor, or 28 on a 7 statement factor, were considered to have met the criteria for the factor. Apart from the missing value of 9, there were three values allocated to each factor: - 1 = a respondent who had met the criteria, 2 = a respondent who had not met the criteria and 3 = a respondent who had met the criteria some of the time.

Strong coping strategies.

This factor included statements 4, 14, 17 and 26.

Statement 4 - 'It isn't necessary to consult with anyone else about my study problems'

Statement 14 - 'I think if you ignore problems they will often go away'

Statement 17 - 'when I have a problem, usually I solve it myself, but sometimes I need to ask for help'

Statement 26 - 'If I have a problem, I try to think of a lot of possible solutions'

The coding was therefore: -

1>=16; 2<=8; 3 = 9 -15.

Life-challenger

This factor included statements 3, 8, 12, 15, 20, 23, and 27

Statement 3 - 'I like change because it often means that things are going to get better'

Statement 8 - 'I don't think I am usually responsible for things that happen to me in my life'

Statement 12 - I often think that life makes too many senseless demands on me'

Statement 15 - 'My life is going reasonably well and I am managing my studies quite well'

Statement 20 - 'I am very lucky because I have most of what I need to make progress in my life'

Statement 23 - 'I am not sure that I can really influence things that happen to me'

Statement 27 - 'I'm not sure that I am committed to any real plans for the future'

The coding was therefore: -

1 >=28; 2<= 14; 3 = 15-27

Juggling roles successfully

This factor included statements 2, 9, 21 and 24

Statement 2 - ' I haven't needed to cut any of my leisure activities to make time for my study'

Statement 9 - 'I've asked my family/friends to take over some of my chores when I am studying'

Statement 21 - 'It can be hard to find time to study - I have to study at odd times and sometimes only for short periods'

Statement 24 - I like to study when nobody is around - sometimes this means very early or late in the day'

The coding was therefore: -

1>=16; 2<=8; 3 = 9-15

Strategic approach to learning

This factor included statements 5, 13, 16, 18, 25 and 28

Statement 5 - 'I'm becoming better at knowing what to read and what not to bother with'

Statement 13 - 'I read as much as it takes to get good grades'

Statement 16 - 'It's hard to make connections between one topic and the next in my course'

Statement 18 - 'the first things I look for when I start a new unit or book are the aims or outcomes and the TMA requirements'

Statement 25 - 'To be successful, you have to learn most of the materials in the course books'

Statement 28 - 'It's important to find out what the tutor wants and give it to her/him'

The coding was therefore: -

$1 \geq 24$; $2 \leq 12$; $3 = 13-23$

Smooth interaction with institution/tutor

This factor included statements 1, 6, 7, 10, 11, 19 and 22

Statement 1 - 'My tutor's feedback is usually very useful and I can learn from it'

Statement 6 - 'Advice from the regional office isn't particularly useful in helping me make decisions about my courses'

Statement 7 - 'My tutor gives helpful tutorials'

Statement 10 - 'I'm not really sure who to contact if I have a practical problem with my studies'

Statement 11 - 'I consider my tutor(s) to be my main support in my studies'

Statement 19 - 'I am uncertain about choosing and registering for the next course'

Statement 22 - 'I like to contact my tutor at the start of the course so that I can get to know her/him and what might be expected of me'

The coding was therefore: -

$1 \geq 28$; $2 \leq 14$; $3 = 15-27$

Lack of new stress - e.g. - work-related/financial

This factor included statement 15.

Statement 15 - 'My life is going reasonably well and I am managing my studies quite well'

The coding was therefore: -

$1 \geq 4$; $2 \leq 2$; $3 = 3$

No family or personal crises

This factor included statements 29 and 30 as well as item 11 in the questionnaire

Statement 29 - 'If one of my family was ill for a time I'd probably want to leave the course'

Statement 30 - 'If I had any sort of crisis at work or at home, I'd still try to finish my course'

The coding was therefore (item 11 coded as in factor for good physical health): -

$1 \geq 8 + (\text{item } 11=1)$; $2 \leq 4 + (\text{item } 11=2)$; $3 = 5-7 + (\text{item } 11=3)$.